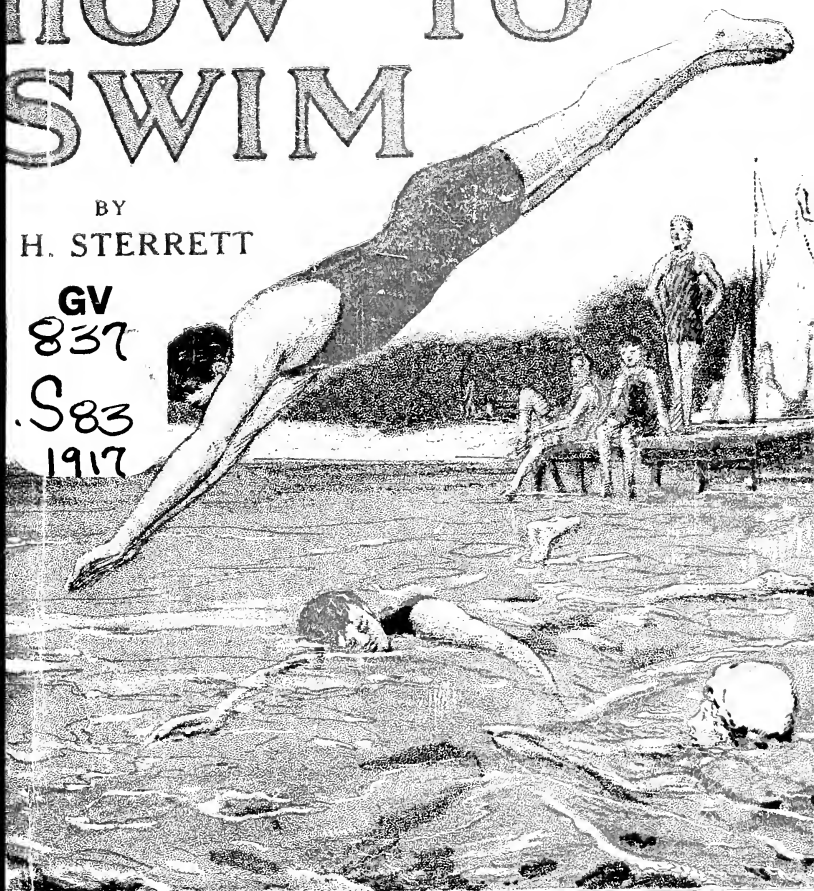


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By

JAMES H. STERRETT

Organizer of the first American swimming club, authority on
swimming matters, and successful amateur coach.

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no 1

James H. Sterrett

The author of this little volume originally compiled the material at the request of the late James E. Sullivan, with whom he was associated in Amateur Athletic Union affairs for a great many years and therefore naturally takes a more than passing interest in the book. With the great advance that has been manifested in swimming, it became necessary to make a thorough revision of the entire matter, at the same time adding a new chapter in life-saving methods which should prove invaluable.

While the author disclaims any attempt of self-laudation, still for the benefit of the many who will read this volume and would like to know his capability for assuming to teach the modern methods of swimming, the following letters, from prominent authorities on the sport, are reproduced:

L. deB. Handley, New York Athletic Club.

"Jim Sterrett may be counted among the pioneers of swimming in this country. He was called the 'Father of American Swimming' when I entered the field of competition 20 years ago. Sterrett's prolific pen, too, has done much to spread knowledge of developments. It was in one of his books that I read the first technical discussion of the principles of aquatic progression ever come to my notice, and his numerous articles on all branches of watermanship have ever held interest for me."

Wm. E. Bernard, Jr., Swimming Coach, Girard College, Philadelphia.

"Mr. Sterrett is known from coast to coast as an authority on swimming, as well as a successful amateur coach. He taught me a lot ten years ago, and I am now successfully using his methods in teaching boys at Girard College."

William G. Friedgen, Philadelphia Turngemeinde.

"Through the early years of Mr. Sterrett's connection with the Philadelphia Swimming Club, which he organized in 1890, he was the guiding spirit of that body of enthusiastic devotees of the sport, always having in view the teaching and propagation of the art of natation among its members, as well as to assist in similar development in other organizations. He lent his aid to the Athletic Club of the Schuylkill Navy and the Y.M.C.A., and was one of the original members of the Swimming Committee of the Philadelphia Turngemeinde, besides being instrumental in promoting many national and district swimming tournaments, thus affording frequent opportunity for competitions."

John W. Stevens, Swimming Instructor, First Regiment Pool, Philadelphia.

"As an expert authority on swimming, James H. Sterrett classes among the foremost in the country, and I attribute my success in the swimming world, both as a swimmer and a teacher, to him—being a pupil of his when a boy, and a close follower of his methods as a teacher. He is a never tiring worker in his endeavor to further the interest in swimming and his advice and criticism is always in demand."

F. Vance Veith, Swimming Coach, Los Angeles A.C., California.

"In my early days of competition, Mr. Sterrett showed me a lot about advanced swimming. I remember once how, in the Central Y.M.C.A. of Philadelphia, before I became a professional swimming teacher, Jim held himself up by the arms on the iron fence at the side of the bath, and demonstrated the crawl kick for me, and then while in the water, gave me some pointers which improved my speed over the 100 yards 10 seconds in two weeks' practice. I use his methods now in teaching, and owe much of my success to his precepts and examples."

Thomas G. Whitaker, Coach, Missouri A.C., St. Louis, Mo.

"Mr. James H. Sterrett can truly be called the Nestor of American swimming. Many times when the pastime took a slump, his unselfish and disinterested efforts were largely responsible for its rehabilitation, and only those who have known the man and come into personal contact with him, know what he has done for the sport, and what it owes him in this country. His kindly manner and encouraging advice has helped many youngsters to achieve their ambition in the swimming world."

Andrew B. Kean, Charter Member P.S.C., Lansdowne, Pa..

"There are many of our present-day 'crack' swimmers who owe their success to Jim Sterrett's coaching. His advice to young swimmers is always on tap. He is ever ready and willing to do what he can to further the sport, and what he did for swimming in this part of the country would fill a volume."

Prof. Charles Holroyd, Swimming Instructor, Training School, Pittsburgh, Pa.

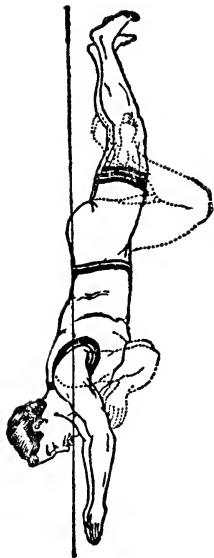
"Jim Sterrett's work for swimming during the past 25 years has done much toward organizing the sport in this country. He has made it possible for a number of expert teachers to secure positions, while he himself has started many a young lad with the proper stroke, who has afterward become a successful racer."

Charles B. Durborow, America's Long-distance Swimmer.

"I have had advice from numerous coaches in connection with my training for long-distance events, but Mr. Sterrett has been tireless in his interest in my swimming and has accompanied me on many of my big performances, and has always been a steadfast and dependable friend and adviser. I have closely watched his work as a coach of speed swimmers, in which line he has been so successful."

Gordon M. Mullen, Swimming Instructor, Hygeia Baths, Atlantic City, N. J.

"James H. Sterrett, affectionately called 'Papa Jim' by his host of friends, is the most liberal swimming philanthropist I ever met, always ready to impart his expert knowledge to the 'other fellow.' He is one of the few of the old school of swimmers who has kept right up to date in the art. He taught me to swim all the strokes scientifically, and I owe much of my success as a teacher to his helpfulness."



BREAST STROKE, SIDE VIEW.



CRAWL STROKE, SIDE VIEW.

Swimming a Necessary Part of One's Education

Some years ago it was not so easy to get people interested in the art of swimming and to have them realize the necessity of a knowledge of how to keep the body afloat and to propel it through the water by means of the arms and legs, in order to be able not only to save one's own life but be the means of rendering assistance to others in time of danger and accident. Conditions have greatly changed in this direction now, and swimming is on a strong wave of popularity; in fact, the great mass of people of the United States, both young and old, have taken up this pastime with so much vigor and enthusiasm that it will not be long ere this country, as in many other things, will lead all the nations of the world in its educational interest in spreading this useful accomplishment, as our competitive swimmers are now leading the world in speed swimming and skill in the water.

That swimming is healthful, splendid for development, easily acquired and should be a part of one's education and taught in schools as being as necessary as reading, writing, and arithmetic, is now generally admitted, and means have been provided in nearly all the large cities whereby the school children are given the proper facilities, under careful and up-to-date instruction, to bring about the desired end.

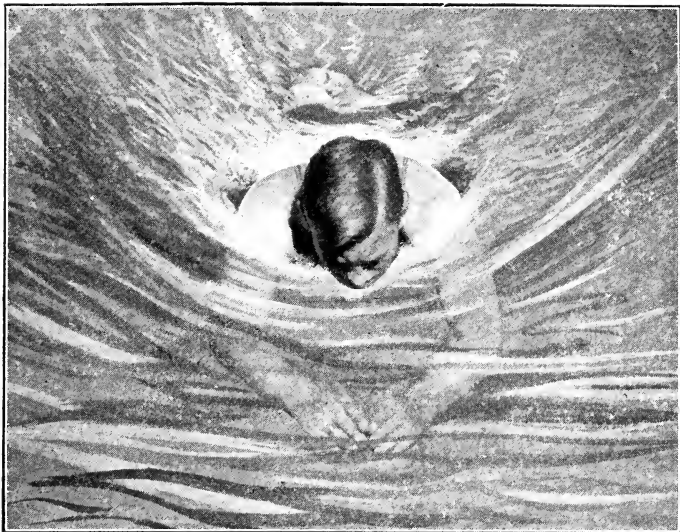
The Simple Method

It is not our purpose in this book to go into any extended details or give dry statistics, but to show by simple and plain talks on the art and science of swimming and by language that is clear and readily understood, with the assistance of various pictures, the different positions in the water in swimming the breast stroke, the over-arm side stroke, the double-over-arm stroke (sometimes called the Trudgeon), and the now generally accepted and famous "crawl" stroke, as these four movements in the water practically complete one's swimming education and make their possessor worthy of the title of an expert.

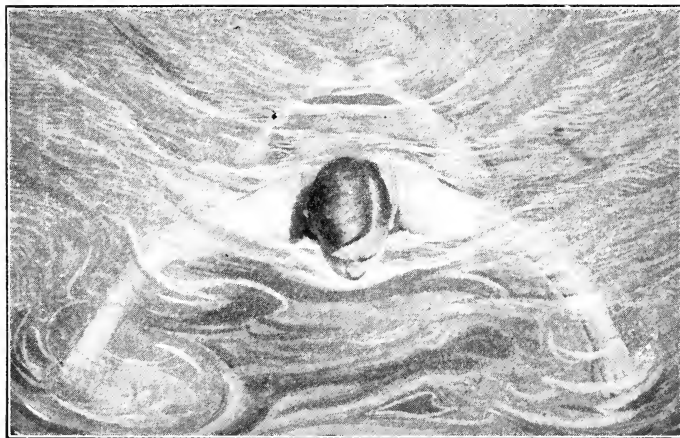
There has been considerable controversy among expert swimmers and teachers as to whether it is best to learn the crawl stroke first, or the breast stroke, and various competitive tests have been made in order to let the exponents of each principle prove, if possible, the superiority of one method over the other, but no permanent deductions have been arrived at; however, the author, aside from having decided opinions himself in this matter, considers that where one method has an advantage over the other, both have their good points.

Crawl Teaching Is Quickest

It is claimed that one can be taught quicker by a sort of dog-paddle, sometimes spoken of as the crawl stroke, and we will admit this to be so, but those who learn by this route are seldom good swimmers until they master the other strokes, while the breast stroke as an elementary one, although being a little harder to grasp, on account of the co-ordination of arms and legs, gives more confidence to



THE BREAST STROKE.
Beginning and Ending of Stroke.



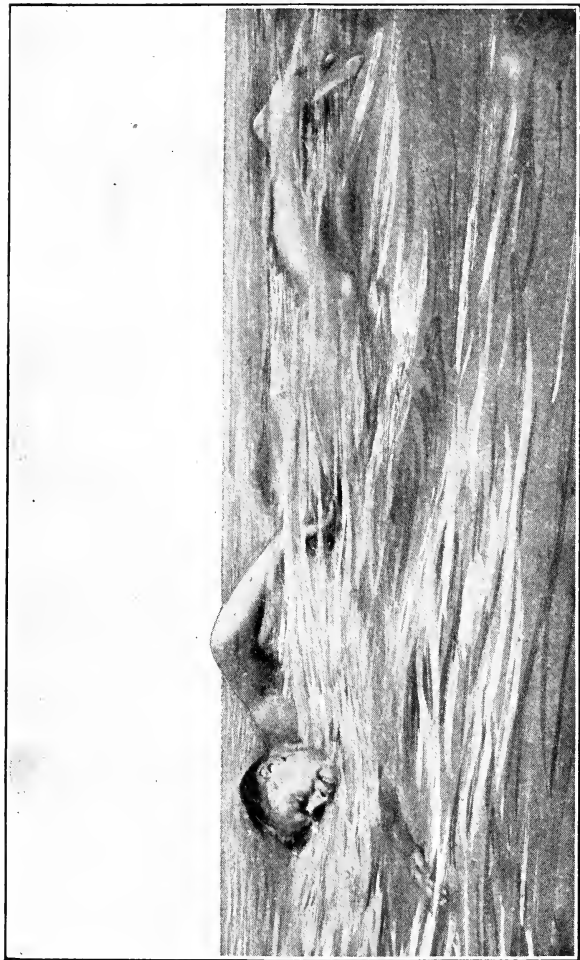
THE BREAST STROKE.
Count of Two. Separating Legs, Toes and Knees Pointing Out.



THE CRAWL STROKE.
Head-on View, Showing Position of Arms and Legs at Beginning
of Stroke.



THE CRAWL, SECOND POSITION, EXHALING UNDER WATER.



THE CRAWL, THIRD POSITION, TAKING A BREATH.

the beginner, and he or she will rapidly advance from this point on, and even in the early stages will be able to swim farther and with less effort than by the so-called crawl method; however, if the beginner can grasp the Trudge-crawl at the very start, the result will be much easier and the advancement more rapid.

But, as we will show and explain both methods, the reader who does not know how, can choose either one, and if he is taught by a professional instructor, or some expert amateur coach, it matters not which way he learns, so that he accomplishes the first object—to keep the body afloat and propel it by means of the arms and legs.

The very first thing you want to get in your mind, and fasten it there firmly, is the fact that there are only three things necessary to become a good swimmer—the proper timing of the stroke, or what experts call the alternate action or harmony (timing); breathing; and the ability to relax; and when you have acquired these things—and every one can master them—you will not only be able to swim well and without effort, but go indefinite distances in the water just as easily as walking on the land, and swim as long as your vitality will permit and the lowered temperature of the body will allow.

The Breast Stroke

And now for the simple lessons, beginning with the breast stroke.

To swim the breast stroke the beginner lies flat on the water, being supported by water wings, rubber life preserver, or held up in shallow water by the hand of a friend or instructor. The body, except the head and shoulders, is

submerged a few inches under the water, the arms and legs outstretched in a line with the body, the hands, with palms downward, touching. The toes, knees and feet should be pointing outward.

When beginning the stroke it is best to make the movements with three counts. At "one" the hands are parted, describing a semi-circle, and at "two" are brought up under the chin, the knees being simultaneously brought up under the body, pointing outward, the legs being separated. At "three" the hands are shot out in front of the body and the legs whipped together, completing the full stroke, the body being allowed to float for an instant before again beginning the stroke, to get the benefit of the run as well as a little rest between strokes.

At first the pupil may naturally keep the limbs tense in going through these movements, and it is this, and holding the breath, that tires, and not the muscular movements. But you will soon loosen up after gaining a little confidence and you will find how easy it is to float on and move through the water. And now comes that all-important part of all swimming—breathing.

Breathing

Breathing plays the most important part in the art of swimming; in fact, no one ever becomes a good swimmer unless attention is paid to the matter of breathing, which must be done with regularity and precision. This is especially necessary when using the advanced or scientific strokes and much of the speed and endurance in swimming depend on a correct performance of this part of the work. In breast swimming, the head and face being more

above the surface of the water than in the side strokes, breathing is usually performed through the nose alone, keeping the mouth closed in order not to take in any water. But it is not long before those who breathe in this fashion find out that the respiration is restricted, irregular and jerky, and the swimmer soon gets "out of wind" and tires, wondering why it is that he can only go such a short distance before he is "played out." To nothing else, so much as breathing, is due the inability of those who can swim to keep up the speed and regularity of movement for an indefinite period.

Annette Kellerman, the wonderful Australian woman swimmer, makes the matter of breathing very clear when she says, "Take a quick gulp of air through the mouth and let it ooze out slowly through the nose." What could be more simple in explanation? In swimming you breathe entirely different from any other form of exercise, and you will never swim well, easily or far, until you breathe as described above and in unison with each stroke. It is much better to take the quick breath through the mouth and then submerge the head and exhale through the nose under water, for once you have mastered this you have learned the real secret of success in swimming.

Make the stroke easy, and in proper timing, or co-ordination, breathe regularly and with precision on each stroke, and, above all, do not keep the limbs stiff or rigid, but relax, as swimming is not a matter of strength or force, but skill.

Be patient and persistent and you will soon acquire an art you can enjoy, with much physical benefit and great pleasure, until extreme old age.



OVER-ARM SIDE STROKE, POSITION IN WATER.



DOUBLE-OVER-ARM (TRUDGE).
After the Roll, Exhaling Under Water.

The Over-arm Side Stroke

Having mastered the breast stroke sufficiently to feel comfortable in the water, the pupil is now ready to learn the more advanced swimming strokes, and the best one to take up next is the over-arm side stroke, a method by which Joey Nuttall, of England, held all the world's records and won all the championship events from 100 yards to one mile, defeating all comers and being unbeatable throughout the world for over twenty-one years.

The over-arm side stroke is still one of the very best methods, and is used by many of the world's great swimmers, particularly for long distance swimming, as it is not only very easy and comfortable, but requires less exertion than any of the other strokes, and one can glide along smoothly and at a good pace and keep up the movements for an almost indefinite period.

As in many other things where greater speed is required, the over-arm side stroke gives better pace and a longer run, because of the fact that the body, being on the side, presents less resistance than when on the breast, and, by minimizing the negative parts of the stroke, we get a maximim amount of positive action, resulting in more speed, with no greater effort.

Breast Stroke Elementary

The breast stroke is distinctly an elementary stroke, and until a swimmer masters the over-arm side or the double over-arm strokes he cannot be classed as a first-class performer in the water, as these modern and up-to-date methods are now recognized by all first-class swimmers throughout the world, both for record-making perform-

ances as well as for all-around swimming ability. These strokes have been experimented with and brought to a state of high proficiency in recent years by expert swimmers, and are practical and useful in all kinds of water and under every possible condition, requiring the least energy and giving the best results, with little lost motion.

Before describing the over-arm side stroke, we wish to emphasize the fact that the idea is to have a power working continuously on the water, for as the over arm is being drawn through the water the legs are drawn up and the under arm is shot forward, and when the over arm extends the legs are brought together, and the body moves through the water with a continuous run, and, when the stroke is properly timed, or the swimmer acquires the alternative action, he glides along quick and fast from the power of each stroke, without much loss of pace. It matters not which side the swimmer lies on, as the side that comes most natural will be found to be the better side, although some people, being ambidextrous, can swim as easy on one side as the other.

Right Side for Illustration

For the purpose of illustrating the lesson, we will imagine the swimmer to be on the right side. At the start of the stroke and on the count of "one" the lower arm should be pulled steadily downward toward the hip, but keeping it on the inside line of the body, and not toward the back, which will keep the swimmer on his side much like a cutter or yacht on her keel. The fingers should be kept closed, with the thumbs touching and forming a sort of spoon-shape, and used much like an oar in the pull through the water.

When the under-arm stroke is finished the hand should be turned quickly, palm upward, in order to have as little resistance as possible, and pushed rapidly forward to the point where it began. The over-arm stroke is started as the downward part of the under-arm stroke is finished, and should begin its downward course about six inches in front of the face. The upper arm should be slightly bent to work clear of the chest, with the palm and thumb pointing downward and cuplike, to get the most from the pull.

The Pull Through

When the upper arm is about opposite the shoulder in its pull through the water the legs should be separated for the leg stroke, and they should be in position for giving the snappy kick when the hand leaves the water and the kick should be completed and legs straightened out before the upper arm is ready to begin the next stroke. The legs are opened up and brought together simultaneously, the upper leg being brought forward, the knee slightly bent, and the foot kept in its ordinary position and not allowed to hang free, the lower leg being bent backward, with the heel toward the thigh and swinging on a hinge (so to speak), so that there is little resistance. Both feet should be kept near to the surface of the water, except at the end of the stroke, when the right foot dips to come just under the left.

Keep on the Side

Remember that you must keep on your side like a cutter. You must not roll over on your breast, but keep in a straight-line position, for, if you turn, or reach too far ahead with the upper arm, you will throw yourself out of position and lose the easy run.

And, as in all the other strokes, remember about breathing and relaxing, the great factors in making you swim easier, further and better than other swimmers. As the under arm is drawn down, take the quick breath or gulp of air through the mouth, closing the mouth and exhaling through the nose until the completion of the stroke, and then begin all over again. You will find that you do not have to make any effort to keep your body afloat while on the side, therefore you can relax more, and when you get the stroke and the breathing and relaxing in harmony, it will be dead easy.

Persist, practice daily and do not get discouraged, for all of a sudden it will dawn on you that you have mastered the stroke and will soon go through the movements intuitively.

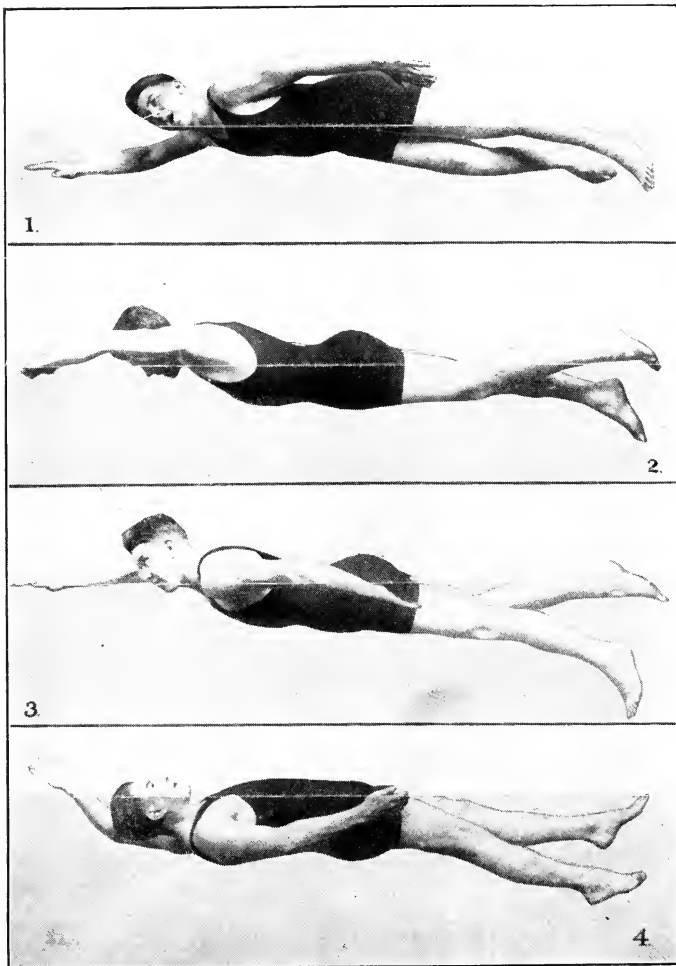
The Double-Over-arm or "Trudgeon" Stroke

Once the swimmer has acquired the over-arm side stroke, he is not only ready but invariably ambitious to swim the double-over-arm stroke, and this desire is but natural, as it can be readily seen that the latter method gives an opportunity to increase one's speed as well as to get a more evenly balanced exercise from this form of stroke; and here a word or two about swimming as an exercise and for body development is in order, for it can be shown that there is probably no other form of exercise that is better for a uniform development of the body and which brings all the muscles into play, including the heart and lungs, than swimming.

The exercise of swimming has the effect of toning up and quickening the whole muscular condition, making the

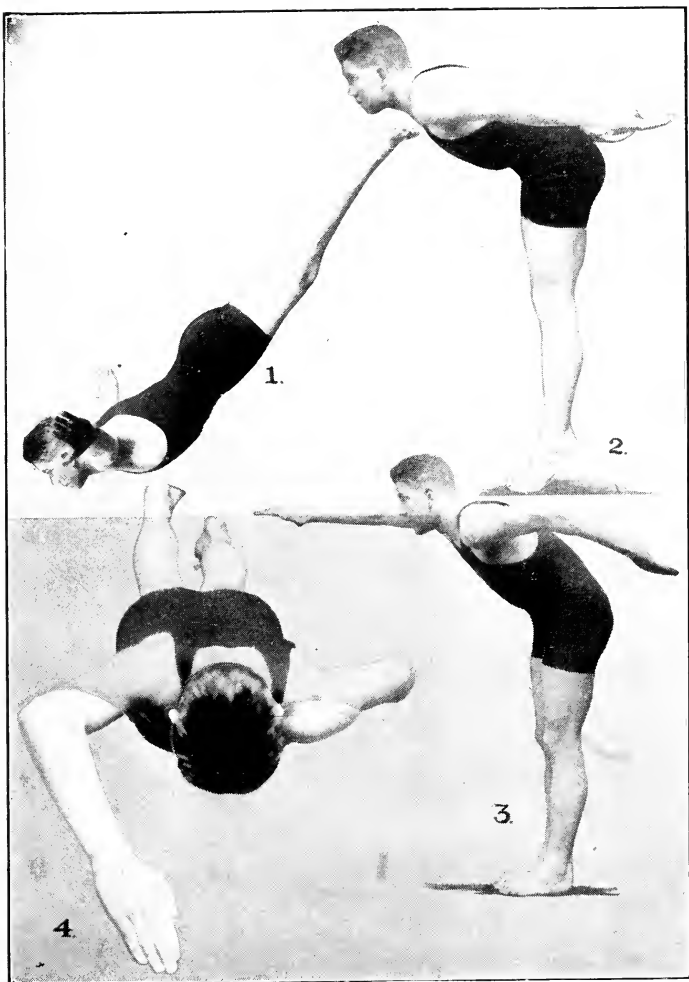


HERBERT VOLLMER, N. Y. A. C., SWIMMING THE TRUDGE-CRAWL.



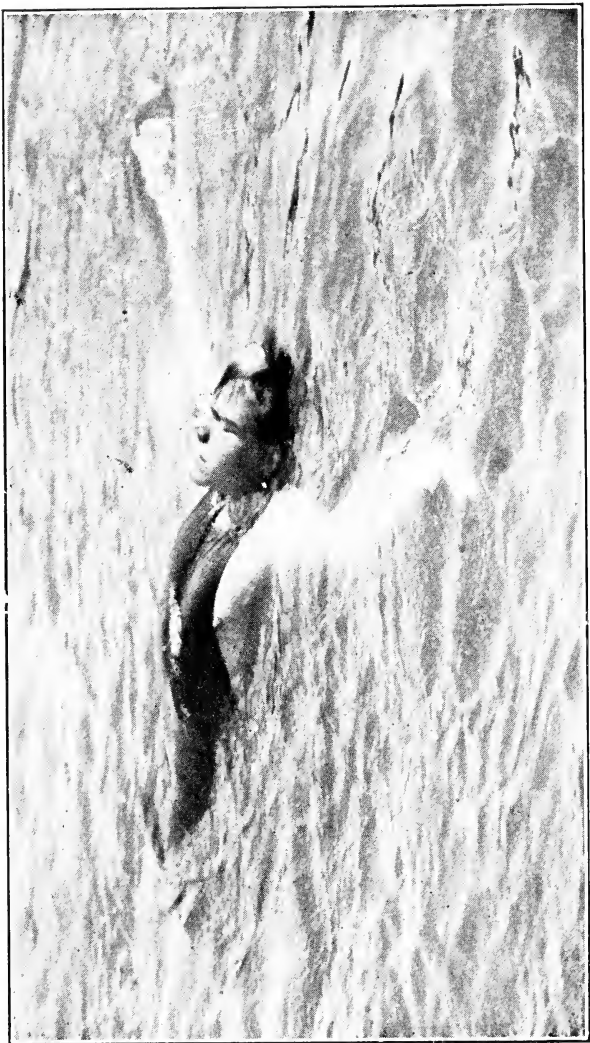
1. Position for breathing ; 2, Correct position for Crawl, showing arched back ; 3. Overhand Stroke with Crawl Kick ; 4. Back Overhand Stroke.

Photos posed by Teddy Cann of the New York Athletic Club and copyrighted by American Press Association, N. Y.



1. Correct position for Swan Dive; 2. Correct stand for Race Start; 3. This illustration is only designed to show the Crawl Stroke position of the hands; 4. Crawl Stroke (in action) position.

Photos posed by Teddy Cann, of the New York Athletic Club and copyrighted by American Press Association, N. Y.



SWIMMING ON THE BACK. IN ACTION.

moving muscles pliant, responsive, and not bunched and hard, as in the case of some of the heavier athletic and gymnastic pastimes.

The double-over-arm stroke is more frequently referred to as the Trudgeon, but nowadays this name is a misnomer, as the original Trudgeon stroke was so called after a man by that name had won an English 100-yard championship, using the double-over-arm, or both arms out of the water, but kicking a sort of leg motion like the breast stroke action, a style not now approved of by modern swimmers, because the scissors kick, as used with this stroke, made the same way as in the over-arm side stroke, has been found to be better, faster and more graceful in action.

The Stroke for Distance Work

Before describing the movements of the double-over-arm stroke, we will here remark that almost all the world's records for middle and long-distance swimming have been made by this stroke, and some idea of the speed attained can be formed by the following records, all made by George Hodgson of Canada, one of the world's greatest distance champion swimmers, and the best exponent of this method the writer has ever seen: 400 meters, 5 minutes 24 2-5 seconds; 1,000 meters, 14 minutes 37 seconds; 1,500 meters, 22 minutes; 1,600 meters, 23 minutes 28 1-5 seconds, and one mile, 23 minutes 34 1-2 seconds. And at the time the great swimmer made these records at the Olympic games in 1912, he defeated all the fastest and best swimmers and record-holders from all parts of the world, some of them using the famous crawl stroke, thus proving him-

self, as well as the stroke, to be the best in the world at that time.

While it would not be literally correct to call the modern Trudgeon stroke a "double-over-arm-side stroke," yet that is most nearly what the motions of the double-over-arm approach, for you must first swim one part of the stroke as a side-stroke movement, and then roll over partly on the breast to get your other arm out of the water, thus giving you more positive action and greater speed by getting both arms out, than you would get from the single-over-arm, in which one of the arms must be pushed under and through the water, with the resistance such negative action entails.

Depends Upon Side

If you swim on the right side you begin the movements of the double-over-arm stroke by diving into the water, or pushing off on your side from the side or end of the tank, or the shore, and, when at full length, with right hand under the water and extended beyond the head, and the left hand pointing backward, and at the count of "one," bring the right hand downward, on the inside line of the body, and not behind the back, for this movement will keep you on your side like a cutter, while if you pull downwards and back of the body, you will be thrown on your chest too soon and stop your run.

At the same time as the right arm is being drawn downward, and on the same count of "one," the left arm is thrown forward out of and clear of the water, and at the count of "two," the left leg is drawn up to meet the left arm as it comes down and through the water much like

an oar, and at "three" the legs are whipped together and the body turned partly on the breast and the right arm brought out of the water and thrown forward, the body rolling to the right side again and repeating the same movements. If you swim on the left side, of course you must make the movements described to suit the opposite arm and legs from those given in the description.

The Test of Breathing

And now you are up to the point where it is a real test of whether you have mastered the art of breathing, for this stroke requires regular and automatic breathing, with proper timing and precision on each stroke, before you will be able to swim it easily and as comfortably as the other strokes, because you cannot miss a breath or hold your breath for any number of strokes, but must take the quick gulp of air while on the side as the face is upturned just as you draw the right hand down through the water, then close your mouth, and exhale slowly through the nose while the face is under water, until the stroke is fully completed, or, in other words, breathe in harmony and in timing with each stroke.

The double-over-arm, because of the submerging of the face on each stroke, and because of the forced regularity of breathing, and no effort being required to keep the body afloat, is well adapted for swimming in rough water, as the waves will not be so apt to dash in your face and mouth at the wrong time, to disconcert you, and interrupt the regularity of your breathing.

Charles B. Durborow, conceded to be the world's greatest distance endurance swimmer, uses the double-over-arm

stroke in making all his great long-distance swims, some of which have never been made before or since by any other swimmer.

The Crawl Stroke

The crawl stroke is undoubtedly the greatest stroke that has ever been invented or discovered in connection with the art of swimming, and until its adoption and subsequent improvement by experimenting with it until it was brought up to a high point of efficiency, the swimmers of the world had practically reached their limit of speed performances, having perfected the other strokes beyond further improvement, and thus it was that they were eager to take up the new-found method by which it has been discovered that a person can go stilll faster through the water.

And now, before describing the stroke and the action of the arms and legs when swimming the crawl, as we have done in our previous lessons, we will tell you the secret of why this new method is so much faster than the others, and the whole thing is a matter of eliminating resistance, or minimizing the negative parts of the stroke and getting a maximum amount of positive action; or, in other words, doing the same thing as has been done in many other things to produce greater speed—applying the maximum of power while at the same time reducing resistance to the minimum.

The crawl stroke originated in Australia, and Dick Cavil, one of the members of that famous family of expert swimmers, and one of the best all-around swimmers the author has ever seen, told the writer that his brother, "Tums," in an argument with another swimmer as to

their relative ability, said he could tie his feet together and then beat the other chap for a length of the pool, and when the contest came off he made good his boast.

"Tums" Cavil always argued that the legs were not of much use to him in fast swimming, and he believed that they hindered other swimmers when going at top speed, because in drawing them up and separating them they stopped the run on the stroke, and he at once started experimenting on this theory, with the result that a new stroke was developed and launched on the natatorial world and at once became popular, until now it is used by all the fast swimmers of the world.

At the Olympic games in 1912, Hodgson, the Canadian swimmer, beat all the fastest swimmers in the world at middle distance swimming, using the double-over-arm stroke, and Duke Kahanamoku, the Hawaiian, beat all the short distance men of the world with the crawl stroke, swimming 100 meters (109 1-3 yards) in 61 seconds, and since then the big bronze-skin athlete, at his home in Honolulu, swam 50 yards in 23 seconds and 100 yards in 53 1-5 seconds, which shows how very fast he can go through the water with the crawl stroke.

The Important Point

The most important thing to remember in swimming the crawl stroke is the fact that the body should be kept perfectly flat on the water, the face and head partly submerged, the eyes preferably above the water and looking straight ahead. The arms are alternately reached out at a comfortable distance in front of the head, and on a direct line with the body, not pointing out sideways, but, if any-

thing, pointing at the start of the arm stroke more nearly to the center line of the body.

The catch on the water should be taken at the beginning of each arm stroke, using the weight of the shoulders, without over-reaching, to get a good leverage on the downward pull. The arms must be brought straight down, stopping the pull about on a line parallel with the shoulders, and in recovering, describe a long oval, making sure that before the power of one hand is fully expended the other has taken up the motion, that it may be continuous, for it is this regular and steady pull of the arms, and not the thrash of the legs, that has the most to do with propelling the crawl swimmer through the water.

Breathing while using this stroke is harder than the other strokes, because the swimmer must not roll the body out of its straight line; therefore, the head and shoulders must be slightly turned in order to get the breath, which can be taken after swimming two or three strokes, but later on, when one has mastered the movements better, breathing should be done on each stroke, exhaling slowly under water.

The Leg Movement

The legs are moved up and down in a continuous action, and not necessarily in co-ordination with the arms, the motions being free from the hips and not from the knees, keeping the legs straight, without having them bent much at the knees (a fault almost all beginners have) and pointing the toes out straight.

However, after the swimmer has mastered the leg action, he can bend slightly at the knees, in order to get the sort

of propelling movements necessary to help move the body in its steady pace through the water. But remember, the legs do not play so large a part in the crawl stroke as the arm movements, and are used mostly to keep them afloat and accelerate the run, and the fellow who gets it into his head that the more work and greater fuss he makes with his legs the faster he will go, will soon find that he is retarding his movements and not getting the full speed.

While there are definite and fixed movements for the crawl, hardly two swimmers use the stroke exactly alike, but all of them must nearly approach the proper position in the water, get good balance, breathe regularly and with precision on each stroke, and relax more in the crawl than any of the other strokes, if a clean, easy movement through the water is desired.

The Recognized Methods of the Crawl Stroke

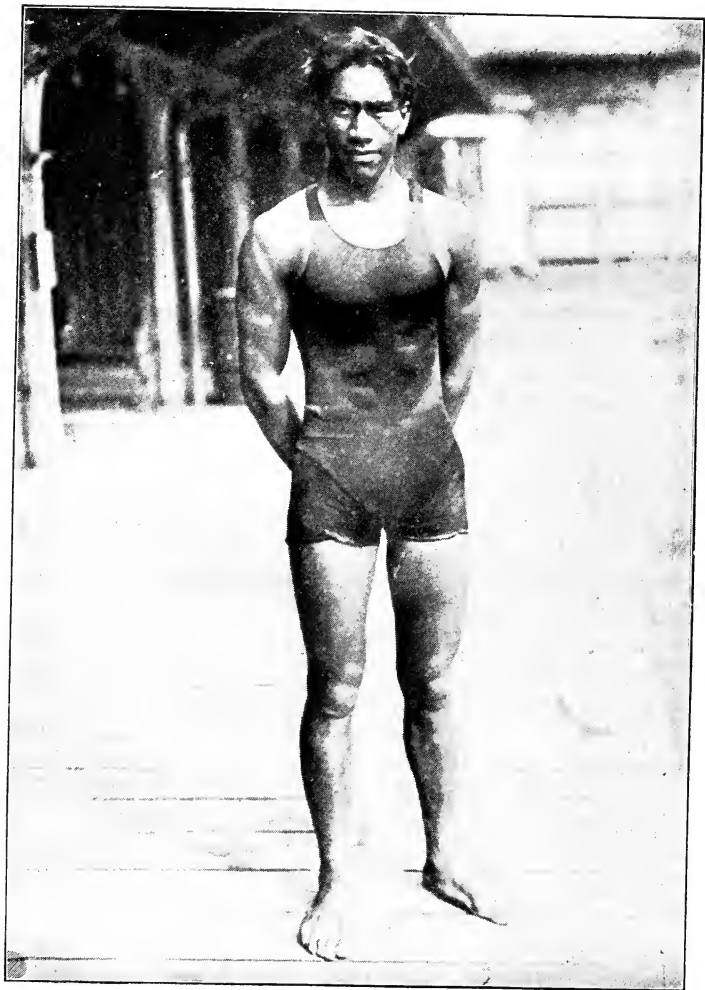
There are two methods of swimming the crawl stroke that are generally accepted by expert swimmers and master coaches, the one being referred to as the straight crawl, where the swimmer lies very flat on the water, with but very little roll in order to breathe, and uses a six-beat kick, which the majority think is the best method for sprinting, say, from 50 to 220 yards, and the other being called the Trudge-crawl, using a four-beat kick, the under leg being used with a short scissor or Trudge kick, and the swimmer rolling more than on the straight crawl, and the action of legs not being as fast, this latter method is considered best for middle and longer distances.

L. deB. Handley of the New York Athletic Club, a recognized authority on swimming matters, and a man who has

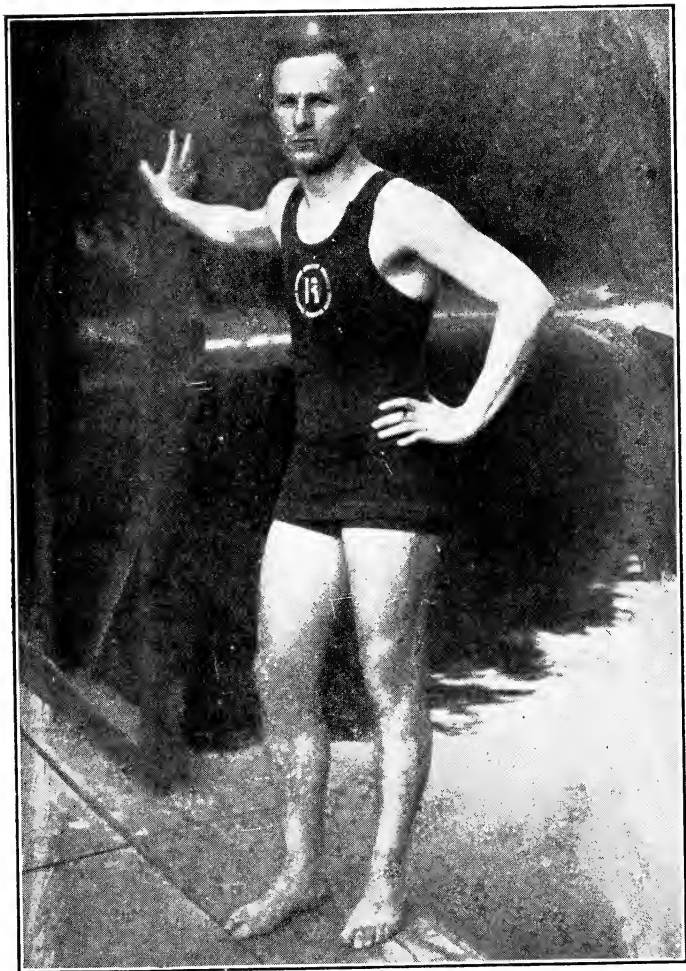
had a lot to do with the coaching of many good amateur swimmers, both men and women, and who has spent considerable time in connection with the study of the crawl stroke, has proposed the following suggestion in connection with the crawl method, which the author cheerfully endorses:

"It has been my aim for several years to have universally accepted a swimming nomenclature that would be descriptive, in as much as possible, and I have classified the strokes under the styles of: crawl, for a leg thrash of even scope; single Trudgeon-crawl, for leg thrash with one major and one or more minor kicks, and double Trudgeon-crawl, for a thrash with two major kicks (double rhythm) or two such kicks and minor ones; then add two, or four, or six-beat, to indicate the number of movements per full stroke. That gives to a swimmer a pretty clear idea of a man's stroke without further explanation, while such names as Australian, American, rotary, etc., mean nothing unless every detail is added.

Swimmers who want to take up a more thorough and deeper study of the crawl stroke than given herein, should read the "Symposium of the Crawl," in "Speed Swimming," No. 36R of Spalding's Athletic Library, price 25 cents.



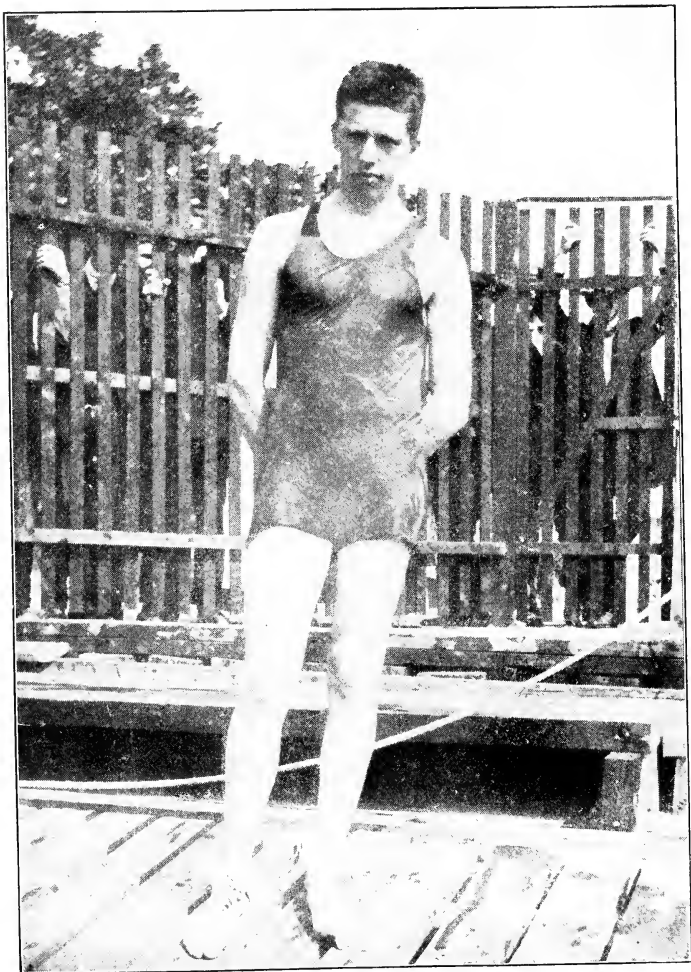
DUKE P. KAHANAMOKU,
Honolulu, H. I.; the Fastest Sprint Swimmer in the World.



LUDY LANGER,
Los Angeles Athletic Club, California; American Champion at 440
Yards, 500 Yards, 880 Yards and One-mile Swims.



H. J. HEBNER,
Illinois Athletic Club, Chicago; Back Stroke and All-Around Swimmer.



GEORGE HODGSON,
Montreal A. A. C.; Winner of 400 Meters and 1,500 Meters Swims,
Olympic Games, 1912, in World's Record Time.

Training for Speed Swimming

There are many and various ways of training for speed swimming, and it would require quite a volume to enumerate them all. Dr. J. K. Shell has prepared for the writer a form of training for swimming which not only fully meets my approval, but it is so good that it is herewith given:

"In training the only maxim for the successful racer is, 'Don't do too much.' It is unnecessary to swim every day, nor is it useful to go the entire distance at each immersion. The aim is to strengthen the muscles, and have the powers and functions trained to an excessive expenditure of power without any deleterious after effects. The best plan for either a one hundred yards or a mile man is to swim three days a week at the pace he expects to race, at intermediate distances, reserving the entire distances for the same day on which the race will take place. The first week of training should be given to running, punching the bag, some hand ball, dumb bells, Indian clubs, pulley weights and general gymnasium work.

"The second week commences the swimming work—go slowly, pay the greatest attention to form, never mind speed, but get your action fully automatic and working with a conservation of energy. Do half of your distance three times this week.

"The third week will see you going on with much greater speed and easier action, and now commence the regular practice of starting and sprinting.

"Starting is but the action of a standing broad jump; there should be but one spring, and that made at the report of the pistol. Stand in the position taken in jumping, just as you are ready to go off. Have the legs bent, the arms back, the body leaning forward, and when the word is given don't straighten up and then spring, nor swing your arms forward and then back and off, nor look at your competitors, nor pick your course, but spring, and spring with power and quickness far out, get the arms in front quick, dive shallow, and get a stroke in under water, and be sure to have your stroke ready upon reaching the surface. These little points come in very important in a hundred yards, and in a distance race give you an advantage of many feet without any extra exertion; excepting that of thinking instead of floating. This sprint and start may be practiced on the intermediate days of swimming.

"During the third week increase your distance to three-quarters, and endeavor to swim it clear through from start to finish, not holding back for the sprint, but depending upon your energy and spirit to sprint out the last 150 yards. The full distance should be swam not later than one week before the race, and at very nearly your best speed. Three days before the race do at your best speed three-fifths of your distance, and rest quietly until the day of the race, doing just enough exercise to keep yourself pliant. On the day keep cool—don't fret and worry. Don't think of a race or racing until you get on your mark, get set, and spring—and strike the water and then swim hard and steady clear through, and swim fair and true.

"The swimmer demands plenty of sleep at night, regular and methodical. Be in bed each night by 10:30, and sleep

until morning; do not let anything disturb you; go to bed to sleep, and sleep that sound sleep that swimmers usually get. In the morning, take a few quick movements, a splash off, a little walk, and a good nutritious breakfast. In eating, use fully all seasonable vegetables, and I would advise the use of a good modern cook's products—except the pastries and highly seasoned dishes. Roasts—beef, mutton and game—and broiled steaks, filets and fish, fruit and custards, all may be enjoyed. But eat slowly, masticate well, and have good cheer wait on you.

“Have a friend—a trainer, a rubber or a mate—with you in training, and never omit a good, hard, conscientious rubbing and massaging and kneading of the muscles; let all your muscles be pliant during this operation; and finally recollect in racing, and in your actions, to be ‘always a gentleman.’ Don’t jockey nor scold, nor be profane, but swim, and ‘may the best man win.’”

In this connection the writer would call the attention of every swimmer—whether he belongs to a college or not—to the Official Intercollegiate Swimming Guide, published annually in the Spalding Athletic Library series (No. 361, price 10 cents) for the Intercollegiate Swimming Association. This book contains not only articles of interest concerning the happenings in the collegiate swimming world, and records of same, but, each year, in addition, contains special articles by leading authorities on some important feature of swimming.

Touching and Turning

Touching and turning is a branch of swimming more practiced for racing than for ordinary purposes. There are several styles of touching and turning, but I will deal with the one most easily mastered, and shall begin by advising the learner to practice across the bath, from side to side, and not to be in the slightest hurry. Master the details of the turn by slow motions, nor need there be any desire to lengthen the push until one knows that he is performing all the motions perfectly. We assume that the pupil is lying on the right side. He must, therefore, when about three feet from the end of wall of the bath, have finished the progressive movements of the left hand, which, instead of being put into the water again to renew the stroke, must be reached forward in advance of the head until it touches the wall immediately above the water mark. The palm of the hand is then placed flat against the side of the bath, the hand being in a horizontal line, with the fingers pointing to the right, which is the direction one will turn to. The little finger is uppermost, and the thumb downward. This done, the body is close to the side of the wall, the knees are now bent, the body turned around by pushing with the hand, that is on the solid wall, until the feet are pressing on the wall and directly below this hand, but, of course, under the surface of the water. The whole body is now drawn up or crouched together, and is turned, as it were, on its axis. It is under water, head and all. The soles of both feet are placed hard against the wall, the

hands put together in front of the head, which is kept between the arms, and the position of the body and limbs should be straight, with the legs crouched up. Then, by a strong movement of the legs, the body is pushed off from the side as if shot from a catapult and straightened out. Its position, when lying on the push, is the same as when lying still, in plunging. From nine to fifteen feet is the distance generally covered by the push off before renewing the stroke. One must be especially careful to guard against pushing off, even to the smallest extent, stronger with one foot than the other, else a slip may take place on the smooth tile work, and that means a loss of perhaps a yard or two, and, in the case of a competition, puts the swimmer off his course, or station, and bumping against another swimmer and fouling are likely to occur.

Ornamental Swimming

If there is any one thing more than another in connection with the art of swimming that will show that a person has mastered the watery element and is at ease at all times in their foster sphere, it is a knowledge of ornamental swimming. To be able to successfully and correctly make any kind of a dive, to float in various positions at will and to perform the multitudinous natatorial feats that are possible, is an accomplishment that stamps the performer an expert. We will, therefore, suppose that those who are about to essay these difficult swimming movements have passed the elementary and intermediate stages and have the ability to float well. Without a knowledge of floating, or at least the ability to control the buoyancy of the body when placed in all manner of positions, it will be almost impossible to make any success of ornamental swimming. Many of the movements that seem remarkable to the uninitiated, however, are not really hard at all, but can be accomplished with practice, by being persistent and patient until finally acquired.

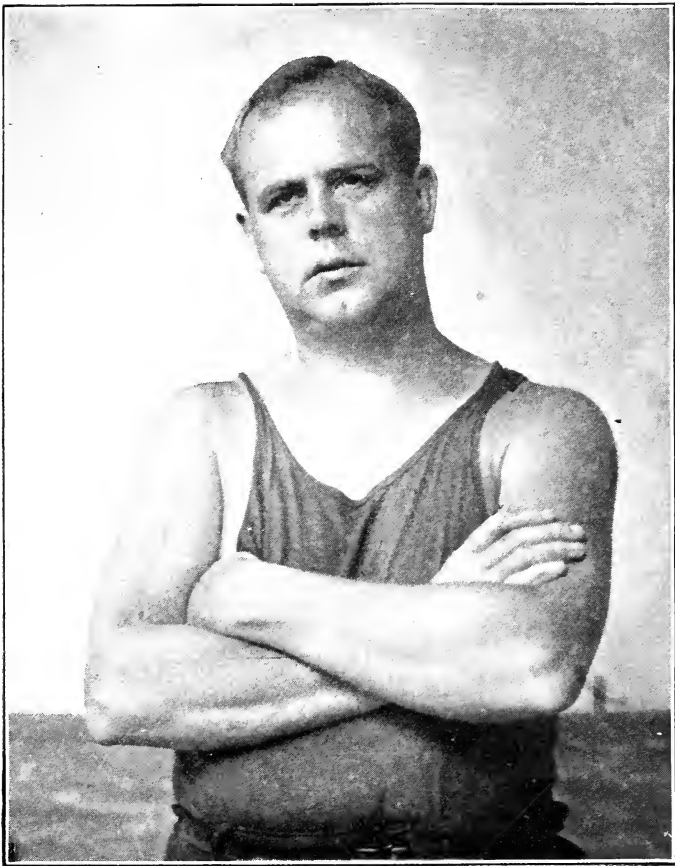
Among the feats that are at all times interesting and those that stamp the swimmer as being clever, are porpoise swimming; sculling on the back, using hands only; the running header; plunging, feet foremost; the sitting jump; imitation of a torpedo; the back dive; revolving; the twister; back somersault; marching on the water; the propeller, and imitation of a bicycle rider.

Floating

Most people can float in salt water, no matter what may be their build. In learning, the first movement is to gradually throw the body on the back, arching the spine, keeping the chest well inflated, crossing the arms over and back on the head, the thumbs locked or fingers touching, which latter movement tends to increase the expansion of the chest and thus make the body more floatable. If the legs are kept straight out and together the beginner will find that their weight in this position, in most cases, has a tendency to sink the body. This can be overcome by drawing up the lower limbs and extending them slightly apart and keeping them bent, which will have the effect of more evenly balancing the body, and then, later on, when the swimmer masters control of the breathing, so that the lungs can be kept partly inflated all the time, he will find that the legs can be gradually extended until they are straight, when the position in the water will be more graceful. Because of their lighter bony structure and increased tissue, women learn to float easier than men, while stout persons, being more floatable, master floating quicker than slim people. But the latter need not despair of learning, for the best floating and the most graceful work I have ever seen of this kind has been performed by comparatively slim people, who have caught on to the proper equipoise of the body and overcome the tendency of the legs to sink. Floating does not

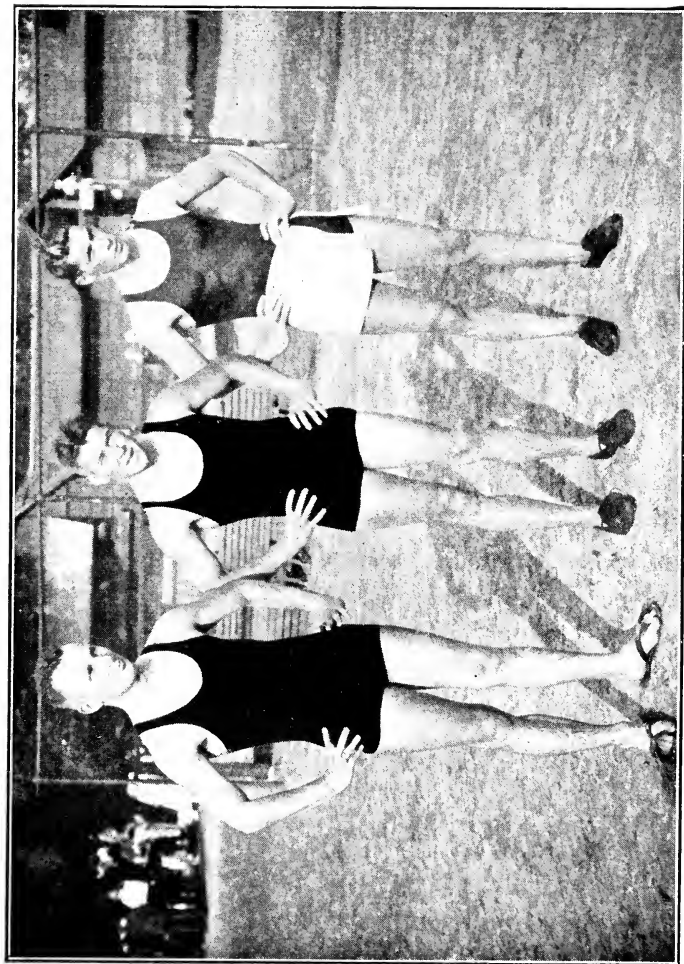
properly belong to the elementary part of swimming, as there is considerable skill required and much practice needed before those who do not float naturally can accomplish the art; but, as the ability to float means so much in ornamental and scientific swimming, the novice is advised to learn to float as soon as possible. Double floating is much easier than single floating, as each of the two performers aids the other in supporting the feet and lower limbs, the parts that have a tendency to sink.

At the seashore nothing can be more pleasant than to go out beyond the breakers and float on the back and be buoyed up and down by the hidden power of the sea, and if one is tired from battling with the strong waves, it is only necessary to turn over on the back, a little farther out, on the long swell of the big rollers, and get thoroughly rested before coming in again.

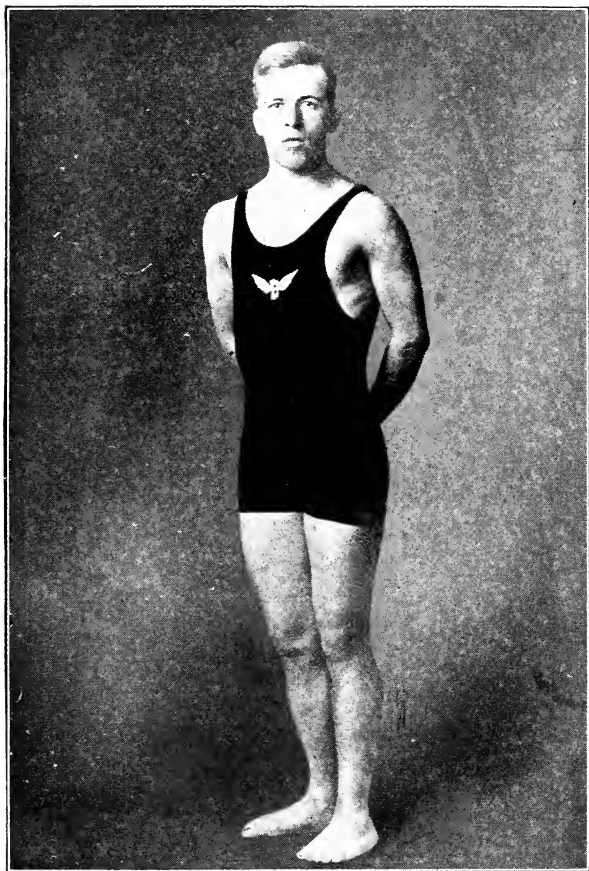


CHARLES B. DURBOROW.

Of Riverton, N. J.; the World's Greatest Long-Distance Endurance Swimmer.

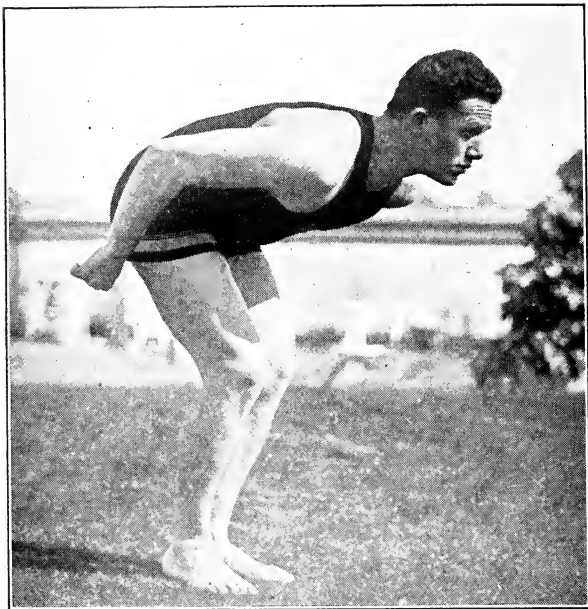


Ludy Langer, Los Angeles A. C.; Teddy Cann, N. Y. A. C.; Herbert Vollmer, N. Y. A. C.
THREE OF THE WORLD'S GREATEST SWIMMERS AND RECORD-HOLDERS.



LEO HANDY.

Brookline (Mass.) High School. Greatest Scholastic Speed Swimmer
in the World. 100 Yards, 56 2-5s.; 220 Yards, 2m. 29 3-5s,
Princeton, N. J., February 12, 1916.



NORMAN ROSS,

Stanford University, California; 20 years of age (1916); 6 feet 1 inch; 207 pounds. 50 yards, 24 2-5 seconds; 100 yards, 56 seconds; 220 yards, 2 minutes 21 3-5 seconds; one mile, 23 minutes 22 seconds; 150 yards on back, 1 minute 56 seconds; plunge, 65 feet.

Diving

Shallow Dive

Diving is a necessary part of a swimmer's knowledge, and once the learner has mastered the simple strokes, there is but one way to enter the water—head first. What is known as the low or shallow dive is not only the best for the beginner, but is useful when one advances to the racing stage in their experience, while being the easiest to learn. To make a good dive, stand perfectly erect, with the hands first placed at the sides of the body, the position being the same as you would assume when making a broad jump. Then bend the legs slightly, draw the arms back of the body and spring forward, getting the arms in front of the head, palms downward, the thumbs touching, entering the water with a shallow dive, keeping the feet and legs close together, without bending at the knees while entering the water. As soon as you make the plunge point the hands upward and the body will come to the surface at once, inclining always as the hands are pointed; for, if you should point the hands downward, then the body would descend. To learn to dive, a little confidence is needed more than anything else, and after you have made your first effort, which, on account of timidity, is usually a little awkward, it will be a matter of a short time only when you will catch on to the idea, after which you will never think of jumping in the water, the pleasure and sensation attending a dive always being fascinating. Of course, there are other forms of diving, such as the high dive, running

header, etc.; but these can be mastered later on, when the pupil has advanced to a higher point in the art, when they will be found to be easy of accomplishment, and you will be ambitious to excel in all the various ornamental and difficult water feats of the expert swimmer.

Running Header

Probably the most interesting kind of a dive is known as the running header. This kind of a plunge admits of considerable artistic execution and finish, and to see a good diver run and spring upward and forward into the air and then poise and control the body, turning it in such a manner as to enter the water gracefully, keeping all the limbs rigid and cutting the water sharply like a knife, without making any splash, is a great treat. The running header is usually made from a spring-board, extending over the water or from the end of the bath. The swimmer takes a short run, similar to that taken by a high or broad jumper, in order to give sufficient impetus or force to the springing or forward movement. Then soaring upward and outward he shoots through the air, keeping the body straight until the declining turn toward the water is made, when a sudden twist of the body is given and the diver enters the water in a slanting position, keeping the upper and lower limbs straight and close together, the arms extended beyond the head, with the palms of the hands or fingers touching in a wedge-like manner.

Back Dive

The back dive is always an interesting swimming feat. It brings into play considerable gymnastic ability, but, on

account of the confidence the performer has as to the certainty that the water will not hurt him much, barring a slight sting to the flesh, should he come down flat on his back, it does not require so much courage, in attempting the first trial, as tumbling on land, in which the back dive may be in a measure likened. While it is possible to make a good back dive from a rigid base, it can be more artistically made from the springing board. The diver stands erect, with his back towards the water. The hands are first held down to and close by the side. The person stands on the edge of the pool on the diving board, resting on the toes alone, the rest of the feet extended over the water. At the movement of making the spring, the diver lowers the body by bending the knees, while at the same time he extends his arms back of the body and then by a quick and sudden movement brings them forward, simultaneously with throwing the head back and entering the water very much the same as the forward dive. When properly done, the back dive is a beautiful method of entering the water.

Diving Feet Foremost

To enter the water, diving feet foremost, is a difficult thing to do, but when such a plunge is nicely made it usually comes in for a good share of merited approval. Most of the ornamental and difficult swimming movements are usually performed in tanks or at swimming gatherings, where there is an audience, and the spectators, who know very little about scientific strokes, are interested, amused and entertained by these other performances, among which none ranks higher than plunging feet foremost. As in

other forms of diving and plunging, the swimmer stands on the edge of the pool or starting station, and, taking the usual breath, leaps outward, feet foremost, much like jumping in the water, throwing the arms behind and over the head and entering the water feet first, instead of head first. The body must be well thrown back, and the legs straightened and kept perfectly rigid while entering the water. One must jump well out and be sure to judge the distance safely in order that there be no danger of striking the upper part of the body on the ledge of the bath, pier or wharf, as the case may be.

The number of ornamental feats in swimming is almost unlimited, according to the ability and ingenuity of the performer; but, in addition to the above-described movements, such figures as porpoise swimming, where the expert describes, by going under and over the water, the swimming of a porpoise; imitation of a torpedo, the head and body being submerged and the feet above the water, the swimmer propelling himself with the hands, the feet alone showing above the water; the back and front somersaults, which are really swimming gymnastics; sculling on the back, using feet and hands only; imitation of a bicycle rider, etc., etc., all of which can be mastered by a clever swimmer with practice.

The Propeller

To perform the propelling trick it is necessary that the swimmer be able to float well, for by that means the body is supported in the water, while the hands, extended beyond the head, the back of the hands pointing downwards, propel the swimmer, feet foremost, through the water. Place the

body on or near the surface of the water as possible, lying on the back, the feet and legs fully extended and close together, the hands beyond the head, also in a straight line. Then, by a vigorous sculling movement of the hands against the water, the body is sent gradually but steadily forward, the quick action of the hands against the water having the same effect in driving the body forward as the propeller of a boat. Some pretty turning movements like the directing of the course of a boat with a rudder can be made by propelling with one hand only or each alternately, as the case may be, as, by sculling with the right hand, the body will glide or take an opposite course, while the left hand movement will direct to the right.

Marching on the Water

Until one sees the swimmer march on the water its title is somewhat misleading. It is not a difficult method of progression through the water, after one catches on to the idea. Place yourself in a floating position, with the arms folded across the breast or the hands crossed back of the head, with the fingers locked. Then by bending the knees and drawing up the legs slowly, one after the other, keeping the toes pointed straight out in the upward movement, so as to have as little resistance as possible against the water. Straighten out the limb, turning the toes upward toward the knee, making a downward stroke with the leg, bringing the calf against the water with pressure enough to draw the body along. The upward, or negative movement, as we said before, must be slowly executed, while the downward, or positive movement, should be performed with

some force against the water, the locomotion, feet foremost, the alternate action being the same as in walking. As it is not possible to get much power from the positive movements, marching on the water is therefore not a rapid means of gliding along.

Swimming on the Back

Swimming on the back is one of the simplest of the natatorial exercises, and one of the easiest methods to learn, besides being absolutely necessary in life-saving, as well as useful as a means of resting after swimming a long while on the breast or side. The movements of the legs are very much the same as in the breast stroke, except that the knees are kept farther apart. The best way to learn to swim on the back is to place yourself in the water on the back, the same as you would when floating. This position can be easily attained by holding the arms straight down close to the sides, the hands pointing toward the feet, and by giving a few sculling movements with the hands, you will at once get into a good floating position. Now slowly open the legs apart, while at the same time extending the arms beyond the head and bring the legs together with a vigorous kick, holding the arms beyond the head for an instant until all the momentum from the kick is expended. At the second movement the arms are brought back to their former position, describing an arc and catching the water with the palms of the hands somewhat like an oar, which helps to send the swimmer ahead, repeating the movements as before.

When tired, swimming on the back is useful as a means of resting the muscles used in the other strokes.

Long-Distance Endurance Swimming

American swimmers have made some wonderful strides in long-distance swimming and tests of endurance in the past few years, until now our records over distance and time immersions stand out prominently among the world's greatest watermen.

Over the very long and tiresome routes our swimmers use various strokes, some of them relying on the breast stroke, others using the over-arm side stroke, but most of them stick to the double-over-arm stroke (sometimes called the Trudgeon), the latter method affording an opportunity for putting more continuous power to the stroke, which makes for greater speed; besides, this method makes the swimmer breathe regularly and with precision on each stroke and is useful in both rough and smooth water.

Space will not admit of recounting the numerous performances made by the various distance swimmers of this country, but all the leading record authorities and writers on swimming have agreed on Charles B. Durborow of Riverton, N. J., the big Philadelphia bank clerk, as the foremost long-distance and greatest mileage swimmer in the world.

Durborow is thirty-four years old (1916); weight, 210 pounds; height, 6 feet; swims the double-over-arm stroke, and has been swimming since 1907. He swims about 600 miles a year, and has covered over 5,000 miles in ten years. In his training, particularly before he begins his very long swims, he does a lot of rowing over long routes,

and generally rows about 2,000 miles a year. He is the only swimmer who has ultimately conquered every swim he ever tried. He never takes any nourishment during a swim, and is always at his work the next day after a big feat, none the worse for wear.

Among the hundreds of big swims made by Durborow, the following record of ten of his greatest performances, some of which have never been equalled by another swimmer, stamp him as the leading distance swimmer in the world:

Thirty-four miles, 12 hours and 44 minutes, from Arch Street wharf, Philadelphia, to one mile below Market Street wharf, Chester, and return to Washington Avenue wharf, Philadelphia, Delaware River, July 10, 1910.

Ten miles, 7 hours and 59 minutes, from Flat Rock Dam to Conshohocken and return, Schuylkill River, July 24, 1910.

Twelve miles, 5 hours and 53 minutes, from the million-dollar pier, Atlantic City, N. J., across the mouth of Great Egg Harbor Bay, over the bar to the beach, at Tenth Street, Ocean City, N. J., in Atlantic Ocean, June 25, 1911.

Forty-two and forty-three-one-hundredths miles, 14 hours, 15 minutes and 31 seconds, from Cape May, N. J., across the mouth of Delaware Bay to Broadkill Shoals, Delaware, Atlantic Ocean and Delaware Bay, July 1, 1912.

Thirteen miles, 8 hours, 12 minutes and 13 seconds, from the Charlestown Bridge to Boston Light, Boston Harbor, July 27, 1913.

Thirty-two and one-half miles, 12 hours and 52 minutes, from Walnut Street, Philadelphia, to one-eighth of a mile below Market Street Chester, Pa., and return to Washington Avenue, Philadelphia, Delaware River, June 27, 1914.

Twenty-two miles, 8 hours and 46 minutes, from the Battery, New York City, to Sandy Hook Beacon, Sandy Hook, N. J., New York Harbor, July 19, 1914.

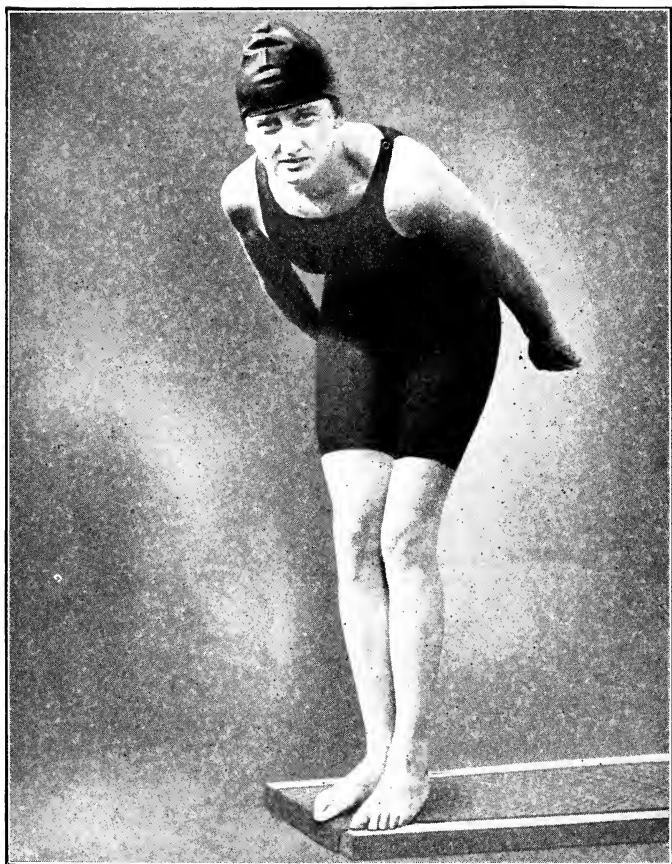
Twenty-six miles, 9 hours and 8 minutes, from Riverton, N. J., to Bristol, Pa., and return to Riverton, N. J., upper Delaware River, May 28, 1916.

Twenty-two miles, 8 hours and 42 minutes, from Cape Charles, Va., across the mouth of Chesapeake Bay to Cape Henry, Va., Atlantic Ocean (swam outside the capes), June 23-24, 1916.

Thirty-six and one-half miles, 13 hours and 30 minutes, from Market Street, Chester, Pa., to Penn Treaty Park, Philadelphia, and return to Market Street, Chester, Pa., and then on the third tide to Eddystone, Pa., Delaware River, September 9-10, 1916.

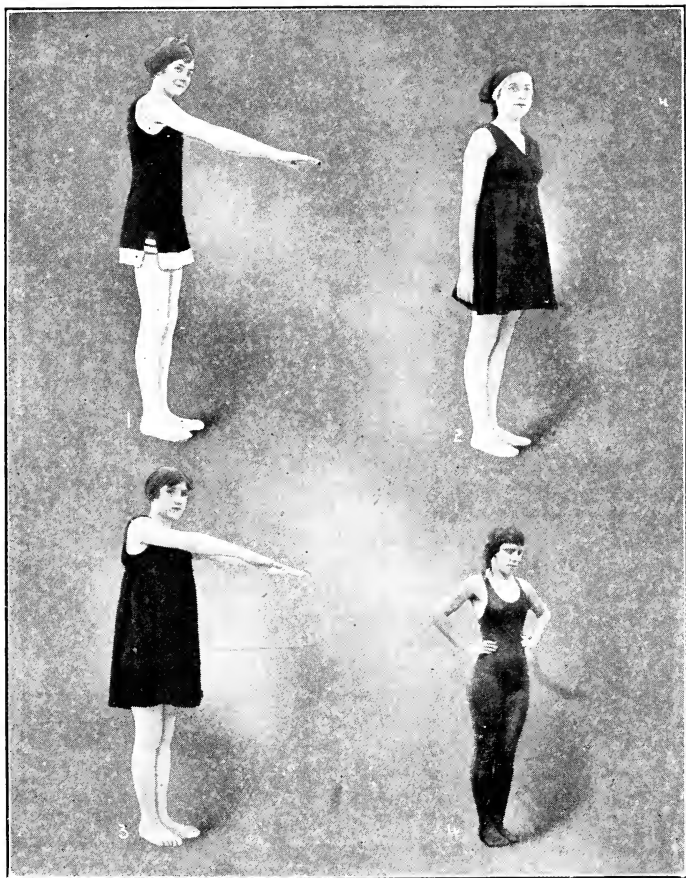


OLGA DORFNER,
Philadelphia Turngemeinde: American Champion Sprint Swimmer and
Record-holder.



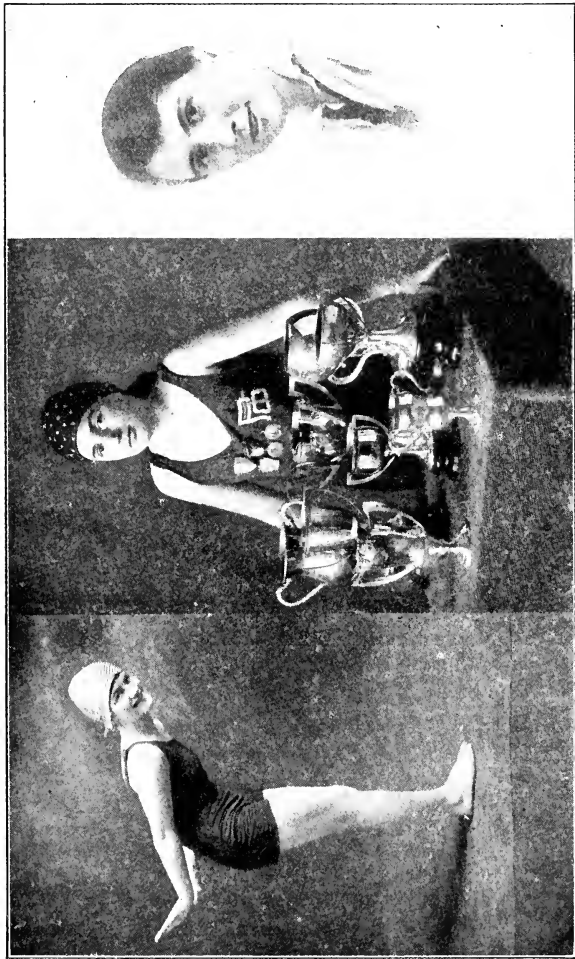
CLAIRE GALLIGAN.

New Rochelle, N. Y.: American Champion Middle-Distance Swimmer
and Record-holder.



1, Gertrude Artelt, P. T. G.; 2, Helen Pennepacker, P. T. G., Middle Atlantic champion diver; 3, Elizabeth Becker, P. T. G.; 4, Josephine Bartlett, Metropolitan champion diver.

A QUARTETTE OF FAST GIRL SWIMMERS AND DIVERS.



Left to right—Bessie Ryan, last Philadelphia swimmer and frequent prize-winner; Florence McLoughlin, First Regiment (Philadelphia), America's greatest juvenile swimmer; Anna C. Kean, Lansdowne, Pa., Ocean City to Atlantic City (in sea), 8h. 28m., and 26 miles, Delaware River, 11h. 8m. 41 2-5s.

Women and Girl Swimmers

Probably no other form of exercise or competitive sport among women and girls has advanced so rapidly in the United States as that of swimming, and with the recognition of women swimmers by registration in the Amateur Athletic Union, contests and championship events have been held in various cities throughout the United States, from the Atlantic to the Pacific, with the result that our women swimmers are rapidly coming to the front in speed swimming, and their records at various distances are very close to the best world's marks for those of their sex.

Women make better swimmers than men, when equally skilled in the art, and while they do not quite approach the speed times of the men, because of the difference in muscular strength and power, they are more graceful than men in the water, practice more frequently, make less fuss about it, and get a lot of physical benefit from their favorite pastime.

A woman, being of lighter bony structure, with more flesh than a man in proportion to her size and weight, and with a different physical formation of body, gets a better equipoise in the water, with the result that most all women float naturally; in fact, after they learn to swim, very few of them have to make any effort to stay on top of the water, which gives them a confidence not usually seen among men swimmers; and, as nature has endowed them with a much better circulation than men,

they are able to stay in the water and stand a lower temperature than the opposite sex without getting chilled.

Miss Olga Dorfner of the Philadelphia Turngemeinde has shown herself to be the fastest short-distance speed swimmer in this country in contests up to 220 yards, at which distances she has defeated all comers, and she holds the American records over these routes. She swims an excellent crawl stroke, and the following times, most of them American records for women, shows her top class as a sprint swimmer: 40 yards, 22 seconds; 50 yards, 29 seconds; 60 yards, 39 seconds; 80 yards, 53 seconds; 100 yards, 1 minute 8 4-5 seconds; 220 yards, 3 minutes 5 1-5 seconds.

Miss Claire Galligan, of New Rochelle, is the best middle distance swimmer among our girls, having defeated all the other aspiring contestants in races over 220 yards. Miss Galligan has swam 100 yards in 1 minute 9 seconds; 220 yards in 3 minutes 4 1-5 seconds; 440 yards in 7 minutes 6 3-5 seconds; half mile in 15 minutes 15 2-5 seconds, and one mile in 31 minutes 19 3-5 seconds. She uses a four-beat Trudgeon-crawl stroke, and is almost certain to break many more women's swimming records, as she is increasing in speed all the time.

Gertrude Artelt, Philadelphia Turngemeinde, is coming on fast at sprint swimming, having now a record of 1 minute 13 2-5 seconds for 100 yards, while her team-mate, Elizabeth Becker, from the same organization, has covered 220 yards in a race in 3 minutes 13 1-5 seconds, with very fast times for the shorter distances.

Bessie Ryan of the First Regiment Swimming Pool, Philadelphia, is a coming fast swimmer who invariably

wins a prize every time she competes. Her 100 yards time is 1 minutes 15 seconds, her 220 yards 3 minutes 35 seconds, and all this in her first year of competition.

Florence McLaughlin of the First Regiment Swimming Pool, Philadelphia, was the most remarkable juvenile swimmer and diver in this country and her many records and prizes over all distances stamp her as a great swimmer.

Miss Anna C. Kean of Lansdowne, Pa., swam from Ocean City to Atlantic City, 12 miles in the sea, August 21, 1916, in 8 hours and 28 minutes, and on September 18, 1916, swam 26 miles in the Delaware River in 11 hours 8 minutes 41 3-5 seconds, this performance being the longest swim ever made by a woman in the world under same conditions.

Modern Methods of Life-Saving

It is often remarked by those who have a very limited knowledge of swimming matters, that it is the good swimmer who gets drowned. This is a very erroneous impression and one that will not bear investigation.

It is the fellow who thinks he is a good swimmer and who usually tries some fool-hardy stunt which he is not competent to undertake, who loses his life. Besides, this sort of chap may be a fair swimmer, but he does not get any practice, and probably overeats before going into the water, and goes far out beyond his depth, forgetting that he has to come back again, and when his muscles and wind, which are not accustomed to the extra tax, give out, loses his head, gulps a big shipment of water, and then the excitement strangles him and brings on heart-failure and he is gone for good. He is not literally drowned, he is shocked to death, for I mean to say it, and most medical men and other experts competent to judge will bear out my statement when I tell you that there are very few people drowned in the water, and that most of the deaths occur from heart-failure, as I have stated above, while the fact that many of the drowning cases in the surf are found floating face down, show that the shock has closed up the epiglottis, and no water has penetrated the stomach or lungs.

But until everyone who attends school is taught to swim and be competent to take care of themselves in the water under all conditions, life-saving must be part of the educational work of swimming, in fact, made a strong feature of



LIFE-SAVING—FRONT STRANGLE HOLD, HELD AT DISTANCE.



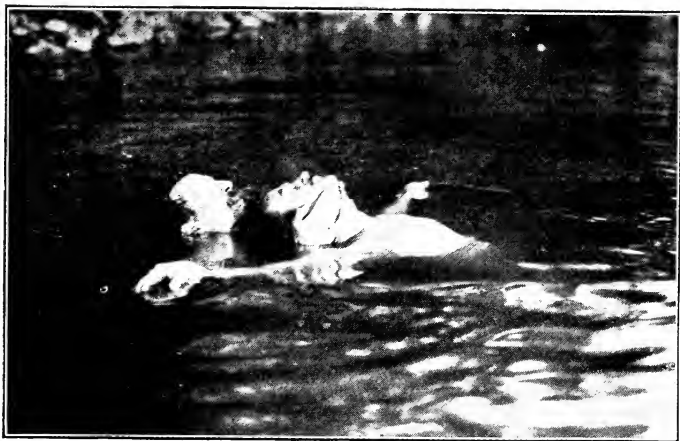
LIFE-SAVING—FRONT STRANGLE HOLD, HELD CLOSE



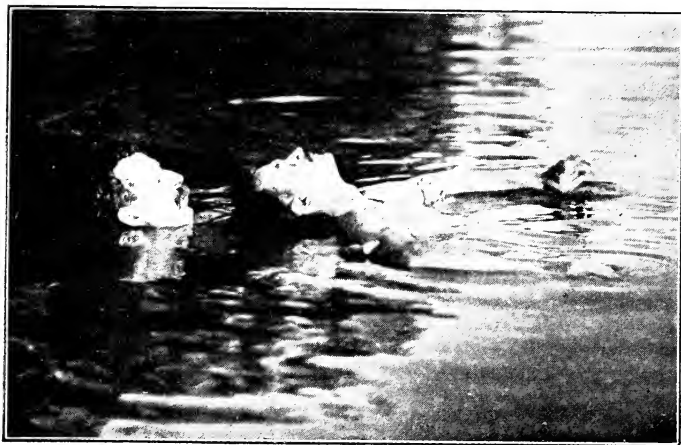
LIFE-SAVING—BACK STRANGLE HOLD.



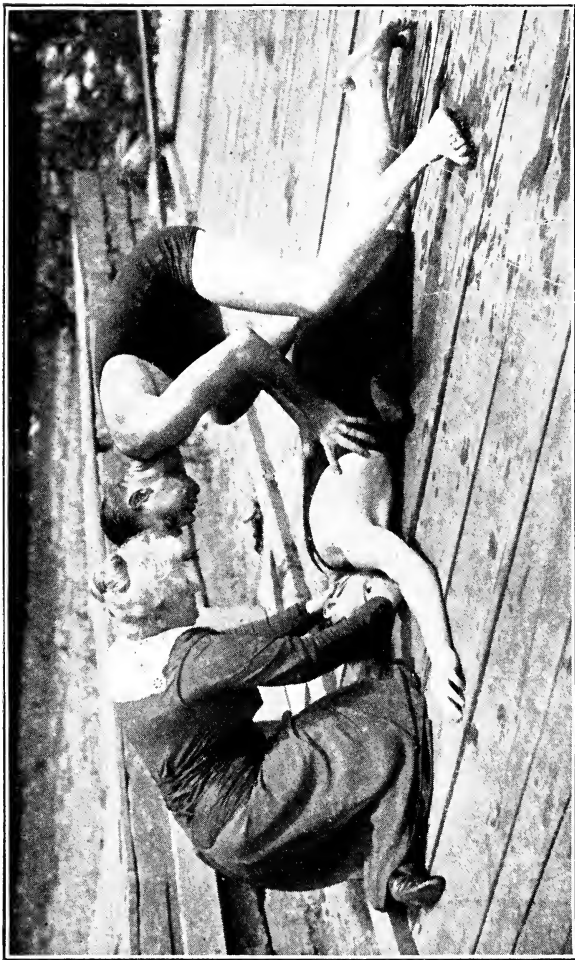
LIFE-SAVING—PITINOFF CARRY.



LIFE-SAVING—HEAD AND CHIN CARRY.



LIFE-SAVING—ARM RESCUE.



LIFE-SAVING—SCHAEFER METHOD OF RESUSCITATION.

natatorial instruction; therefore, it behooves the skilled swimmer to learn the best ways to approach a person in the water who may need help, and better still, to know how to release one's self from the death-grip of a drowning person.

The chief don't that I would emphasize is that, unless you are a good swimmer yourself, and know how to keep cool in times of excitement such as when a boat overturns, or some one is suddenly precipitated in the water, you had better not attempt a rescue, for, while it is very commendable to be a hero, unless you know what you are about, two people will lose their lives instead of one. However, if you are cool, and can swim well, to approach a person in the right way, break any hold they may take on you, and tow them into shore and out of danger, is but a simple task, although if you have to go quite a distance, it may tire you a lot, but you will have that glorious satisfaction of having saved a life of a fellow brother.

In attempting a rescue, never approach a person from in front, if you can possibly avoid it, and you invariably can, unless you are in a boat with them and you are suddenly thrown in the water, and coming up near someone they may grasp you before you have time to get back of them. Always get back of them and then it will be easy to grasp them by the various holds that are herein described, and by telling them to keep cool, easily tow them to shore.

The most likely grip to be taken by the drowning person is for them to grasp you by the wrists, if in front of them. This is a very easy hold to break, for, by turning your elbows up suddenly and your hands down and outward,

they will have to release because they have no clutch on you but the thumb-hold. After effecting the releases, you can turn the person around, so you will be back of them and then bring them in by the holds here explained and illustrated.

A most dangerous hold is for the person to grasp you around the neck with both arms, and clutching you tight, draw you very close to them in a strangle-hold. When this hold is taken, you must put your right arm under their left shoulder, placing your thumb and forefinger tightly over their nose and shutting off the wind, while you press your left hand against his back, drawing him to you and pushing his head back. Be strong and rough about it if necessary, as you will not hurt him, and very soon, because he cannot get his breath, he will release his hold, and then you must turn him around quickly on his back and the rest will be easy, especially if you assure him that there is no danger if he will not try to struggle.

Another hold that looks as if it might be very hard to break is the back strangle-hold, where the excited one grasps you from behind around the neck with both arms. You must at once take hold of both of his hands with your hands, throw your head back with all the force you can, knocking him a hard blow on the nose with the back of your head, and then by ducking your head down under water, you will be able to get free, but you must keep hold of one of his hands in order to turn him around as in the other holds, in order not to lose your grip so you can tow him to safety.

Towing the subject to shore, of course, is much easier than breaking the holds. One of the very easy methods

is to grasp the person by the hair of the head, unless he be bald, and as the body is easy to carry this way and floats well, you can use both your lower limbs and one arm to tow him to shore or to the upturned boat or canoe, if the latter is near, for it is not wise to go further than necessary, for someone will be very apt to come to your assistance if you hold on to the craft, and numerous cases are on record of the rescuer becoming exhausted when having to carry a person very far.

If you are swimming with a friend or near another person who gets tired, it is the easiest thing in the world to help him, for all you have to do is to ask him to place his forefingers of both hands upon your shoulders, he lying on his back, his feet kept close together and between your legs, and then you swim the breast stroke, and as you have the use of all your limbs, the person will be very easy to carry for a long distance, providing you swim easy and slowly and do not try to hurry.

Another method of carrying is by the neck and arm hold, where you turn the person on their side, grasping them with one arm around and under the neck and over their shoulder, to prevent them from struggling, and you can then swim on your side, using one arm under water and getting a side-stroke kick, having the person entirely under your control, in a case where he might be struggling to release himself.

More people's lives are now saved annually than at any time before in the world's history, on account of the advanced ideas now in vogue in connection with the resuscitation of the apparently drowned, and with the latest and best method now used, called the Schaeffer method, it is

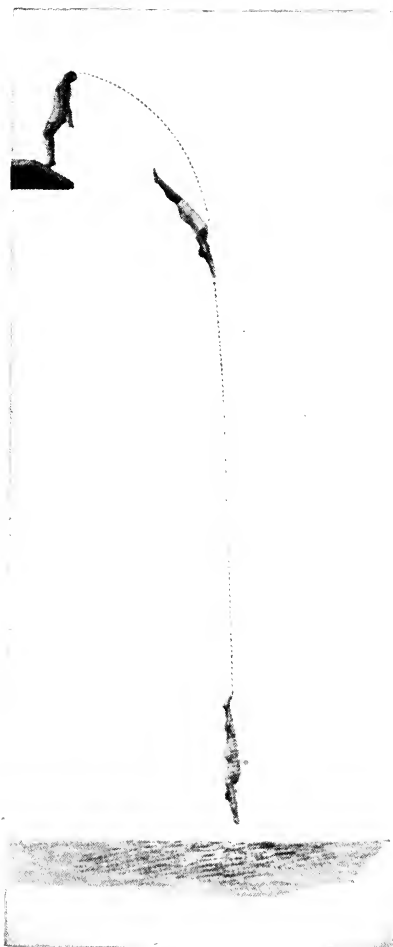
easier to bring the person who is recovered from the water, when not submerged too long, back again to life by producing artificial respiration, and restoring circulation, if life is not already extinct.

As soon as the person's body is recovered, he is placed face down on the beach or some flat place, preferably with the head at the lowest point, in order that any water that may be in the stomach or lungs will be more readily gotten out. The face is turned to one side, the tongue pulled out and fastened by a rubber band, a string, or held out by an assistant, so it will stay out and not fall back again into the mouth and close up the passage-way. The hands are extended straight out beyond the head. The operator kneels down on one knee, grasps the sides of the body just below the lower ribs, making pressure steadily and firmly inwards and upwards, and releasing suddenly, the idea being to make the lungs work something like a rubber ball would act after pressure and on sudden release, or in other words producing an artificial gasp, for the purpose of bringing back respiration, for when this is accomplished, the circulation will be restored, and by keeping the patient warm and rubbing the limbs you will be able to bring the apparently dead back to life.

The work of the operator must not be too quickly done, but timed in keeping with your own or natural breathing, and it is better to have another person ready to take up the work when you are tired and thus work in relays, persisting for a long time if necessary, or until medical help can be obtained, for as long as there is life in the body, even though animation be suspended, there is hope.



HIGH DIVE—PLAIN HEADER.

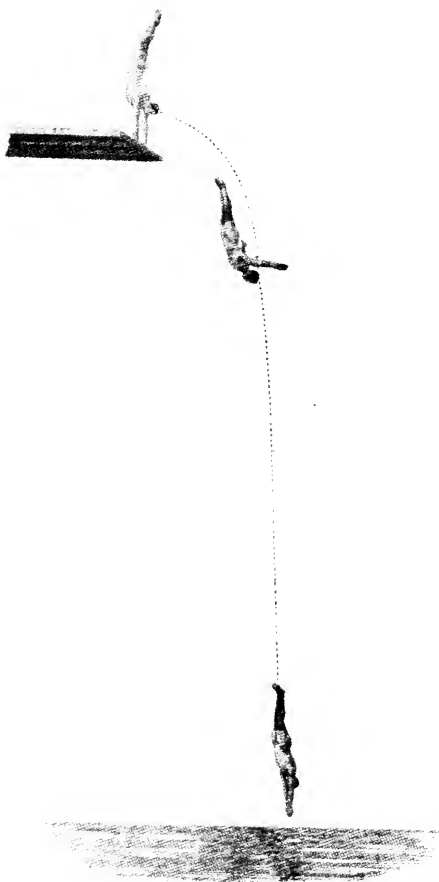


Backward header

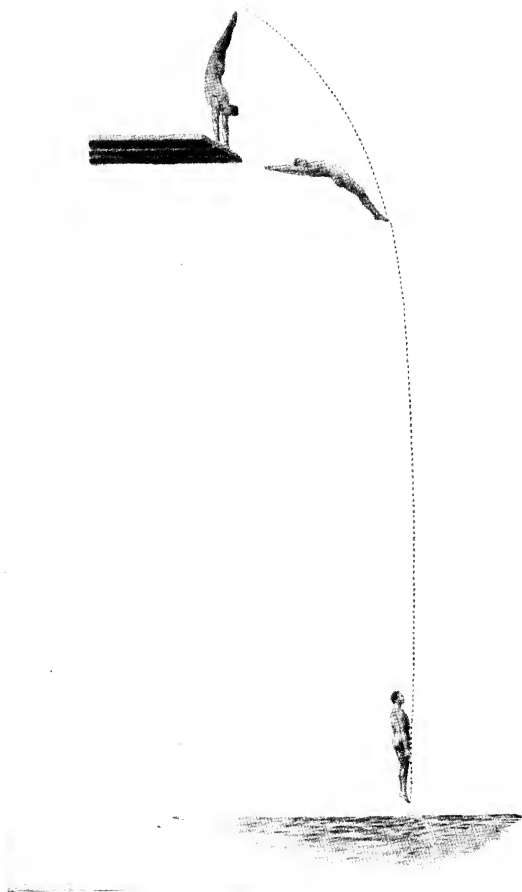
HIGH DIVE.



Backward somersault.



HIGH DIVE—ARMSTAND WITH HEADER.



HIGH DIVE—ARMSTAND WITH OVERBACK.

Competitive Diving

The illustrations of various styles of diving have been taken from the prospectus issued for the benefit of intending competitors at the last Olympic Games, held at Stockholm, Sweden, in 1912. The text for the regulation of diving contests has been taken bodily from Rule 55 of the Amateur Athletic Union handbook.

The Amateur Athletic Union is the governing body of amateur athletic sport in the United States and every amateur swimmer who expects to enter in races or competition of any kind should be registered with his local association of the Amateur Athletic Union in order to prevent being disqualified.

Regulations for Diving Competitions

Instruction to Judges. In making awards for points for each dive the judges shall have regard to the character of the respective dive to be performed, and shall take into consideration: The manner of the dive (proper carriage, confidence and form), the force and speed of the dive, the entrance into the water and how the run or take-off is performed. When judging the carriage the individuality of the diver should be taken into consideration. The bearing in the air should be natural, easy, supple and graceful. When performing plain head dives, the head should be erect, back hollowed,

legs closed with feet turned back, arms supple and fingers closed. The start should be made gracefully, with confidence and in a bold manner; in running dives the force and energy imparted should be considered. The entrance into the water should be made without splashing and with good carriage of the body.

For each dive each judge shall award points according to the following scale:

	Points.
Unsuccessful attempt.....	0
Bad dive.....	3
Fair dive.....	6
Good dive.....	8
Excellent dive.....	10

The judges may mark points and half points between those mentioned in the above scale, but 10 shall be the highest possible that can be awarded by any judge.

An unsuccessful attempt is one in which the competitor has failed to perform the dive nominated.

In all jackknife dives the competitor should enter the water within six feet from the take-off.

All head dives with arms by sides are ruled out.

Swallow and all other forms of straight front dives are to be considered as plain front dives.

In all somersaults or jackknife dives with twists, the somersaults or jackknives must be completed before twisting.

Under observation of the foregoing conditions and instructions in making their respective awards each judge shall:

- a. Write down his points for each dive performed by each competitor according to the scale of points named in point table above.

- b. The points awarded by him for each voluntary dive shall be multiplied by the points allowed for the degree of difficulty in each case as specified in the following diving tables.
- c. After the total of points for each competitor has been found and checked as being correct, each judge shall place the competitors in the order in which they finish on his diving card. He shall give 1, to the diver scoring the greatest number of points; 2, to the diver scoring the second greatest number of points, etc. If two competitors score the same number of points their place numbers shall be added and each given one-half. For instance, if two competitors receive the same number of points, which is the second largest on the diving card of a judge, their place numbers 2 and 3 shall be added, and each competitor shall receive $2\frac{1}{2}$, and the next following competitor shall receive the number 4. The place numbers given to the respective competitors by each of the judges shall be added together and the competitor showing the lowest total of place numbers shall be declared the winner. In case of a tie the point totals of all the judges shall be added together and the competitor whose total of points is greatest shall be the winner of the tie.

A list of voluntary dives shall be submitted by each competitor to the judges in writing before the beginning of the competition. Changes in the list of voluntary dives are not permitted. No competitor shall be permitted to repeat any of his dives.

The Referee must ascertain before the beginning of a competition that the depth of the water is sufficient to insure the safety of the competitors.

Competitions or exhibitions of diving from a greater height than 34 feet are prohibited.

The conditions of a diving competition, namely, height of board, number of voluntary and compulsory dives, and the character of the latter, must be stated in entry blanks.

Fancy Diving from the Springboard. The board shall have a length of 13 feet and shall be 20 inches wide and shall be of the usual elastic character.

In championship meetings the height of the board from the surface of the water shall be not less than 9 feet 6 inches, nor more than 11 feet.

The program for championships shall consist of the following dives: Running front dive, back dive, running forward jackknife, back jackknife and six voluntary dives selected from the following table:

	Standing.	Running.
1—Backward spring and forward dive (half twist)...	1.4	—
2—Backward spring and backward dive (full twist)...	2.0	—
3—Forward spring with half twist and backward dive...	1.5	1.6
4—Forward spring with full twist and forward dive...	1.8	1.8
5—Forward somersault.....	1.5	1.5
6—Forward 1½ somersault.....	1.6	1.6
7—Backward somersault.....	1.5	—
8—Backward 1½ somersault.....	2.2	—
9—Forward double somersault.....	1.9	1.9
10—Backward double somersault.....	1.9	1.9
11—Backward spring and forward somersault.....	1.7	—
12—Backward spring and 1½ forward somersault....	2.0	—
13—Forward somersault with half twist.....	1.6	1.6
14—Forward 1½ somersault with half twist.....	2.2	2.2
15—Forward 2½ somersault.....	2.3	2.3
16—Flying Dutchman (forward spring with backward dive).....	1.8	1.9
17—Flying Dutchman somersault (forward spring with backward somersault).....	1.7	1.7
18—Flying Dutchman 1½ somersault.....	2.4	2.4
19—Flying Dutchman with half twist.....	1.7	1.7
20—Handstand dive.....	1.4	—
21—Handstand dive with somersault.....	1.7	—
22—Handspring dive with somersault.....	1.6	1.6

	Standing.	Running.
23—Jackknife forward.....	1.5	1.5
24—Jackknife backward.....	1.5	—
25—Jackknife forward with half twist and back dive..	1.8	1.9
26—Jackknife forward with full twist and forward dive	2.2	2.2
27—Jackknife backward with half twist and forward dive.....	1.9	—
28—Jackknife backward with full twist and backward dive.....	2.3	—
29—Backward dive.....	1.5	—

In competitions where a lower board is used, the board shall be not less than 2 feet 6 inches or more than 4 feet from the surface of the water and the voluntary dives shall be selected from the following table:

	Standing.	Running.
1—Backward spring and forward dive (half twist)..	1.4	—
2—Backward spring and backward dive (full twist)..	1.9	—
3—Forward spring and backward dive (half twist)..	1.5	1.6
4—Forward spring and forward dive (full twist)....	1.8	1.8
5—Forward somersault.....	1.5	1.5
6—Forward 1½ somersault.....	1.8	1.7
7—Forward double somersault.....	2.2	1.9
8—Backward somersault.....	1.5	—
9—Backward 1½ somersault.....	2.2	—
10—Backward double somersault.....	2.2	—
11—Backward spring and forward somersault.....	1.9	—
12—Flying Dutchman (forward spring and backward dive).....	1.7	1.8
13—Flying Dutchman somersault (forward spring and backward somersault).....	1.8	1.8
14—Handstand.....	1.2	—
15—Jackknife forward.....	1.4	1.5
16—Jackknife backward.....	1.5	—
17—Jackknife forward and half twist.....	1.8	1.9
18—Jackknife forward and full twist.....	2.2	2.2
19—Jackknife backward and half twist.....	1.9	—
20—Jackknife backward and full twist.....	2.2	—
21—Backward dive.....	1.5	—

High Diving from a Firm Take-off. For high diving competitions from a firm take-off the platforms shall be 7 feet wide, fixed, free from spring and placed at two heights, the first not less than 14 feet and not more than 16 feet and the second not less than 24 feet and not more than 27 feet above the surface of the water.

The program for championships shall consist of two compulsory dives from the lower platform, namely,

one plain back dive and one backward somersault; and two from the high platform, one running plain dive and one standing plain dive, and six voluntary dives, to be performed from the high platform and to be selected from the following table:

	Standing.	Running.
1—Backward spring and forward dive with half twist.	1.4	—
2—Forward spring and backward dive with half twist.	1.6	1.7
3—Forward spring and forward dive with full twist.	1.9	1.9
4—Backward spring and backward dive with full twist.	2.1	—
5—Armstand.	1.6	—
6—Armstand and somersault.	1.5	—
7—Armstand backward fall dive.	2.1	—
8—Armstand with double somersault.	2.2	—
9—Backward dive.	2.1	—
10—Backward somersault.	1.7	—
11—Forward somersault.	2.1	2.1
12—Forward 1½ somersault.	1.9	1.9
13—Forward double somersault.	2.2	2.2
14—Forward 2½ somersault.	2.3	2.3
15—Backward 1½ somersault.	2.4	—
16—Backward double somersault.	2.1	—
17—Forward somersault with half twist.	2.1	2.1
18—Forward 1½ somersault with half twist.	2.2	2.2
19—Backward spring and forward somersault.	1.8	—
20—Backward spring and forward 1½ somersault.	2.0	—
21—Flying Dutchman.	2.1	2.2
22—Flying Dutchman somersault.	1.9	1.9
23—Flying Dutchman 1½ somersault.	2.5	2.5
24—Flying Dutchman double somersault.	2.3	2.3
25—Flying Dutchman with half twist.	1.8	1.8
26—Jackknife forward.	1.4	1.4
27—Jackknife backward.	1.4	—
28—Jackknife forward with half twist.	1.9	1.9
29—Jackknife forward with full twist.	2.1	2.1
30—Jackknife backward with half twist.	2.0	—
31—Jackknife backward with full twist.	2.2	—

Plunge for Distance. The maximum height of take-off for the plunge for distance shall be limited to eighteen inches above the surface of the water.

A plunge shall be a standing dive, made head first from an indicated firm take-off (i. e., diving base), free from spring. The body is to be kept motionless—face downward—and no progressive action to be imparted to it other than impetus of the dive.

The plunge shall terminate, if the competitor has not already raised his face above the surface of the water,

at the expiration of 60 seconds, or such time as may have been previously announced by the promoting body. The duration of such plunge shall be reckoned from the time the competitor dives from the take-off.

At the finish of any plunge the competitor must leave the water as quietly as possible. Anyone disturbing the water so as to interfere with the progress of the competitor following will be disqualified.

The distance traversed in a plunge shall be measured along a straight line, at right angles to the diving base, to a line parallel to the diving base, over the farthest point reached by any portion of the competitor's body while fulfilling the above conditions.

In championship or level contests each competitor shall be allowed three plunges, and the farthest plunge shall win. In handicaps, the number of plunges shall be left to the discretion of the promoting club.

When a competitor touches the side of the tank or pool, his distance shall be taken and he shall be compelled to stop.

A line may be made or painted along the bottom of the pool or tank to enable the competitors to guide themselves.

Miscellaneous. A competitor in turning must touch the end of the bath or course with one or both hands before kicking off.

Standing upon the bottom in the shallow end of a bath during a competition is only allowed for the purpose of resting. Walking or jumping from the bottom in the shallow end of a bath shall not be allowed.

The competitor in a handicap race who has the lowest handicap shall have the choice of position.

Where two men are on the same mark they shall draw for choice of position.

In case of a dead heat in a handicap the competitor with the lowest handicap shall be declared the winner. Where a dead heat occurs between two men on the same mark the tie shall be decided by a swim-off on the same day, or the one refusing to swim shall be given the next lowest prize.

Choice of position shall be drawn for in races other than handicaps.

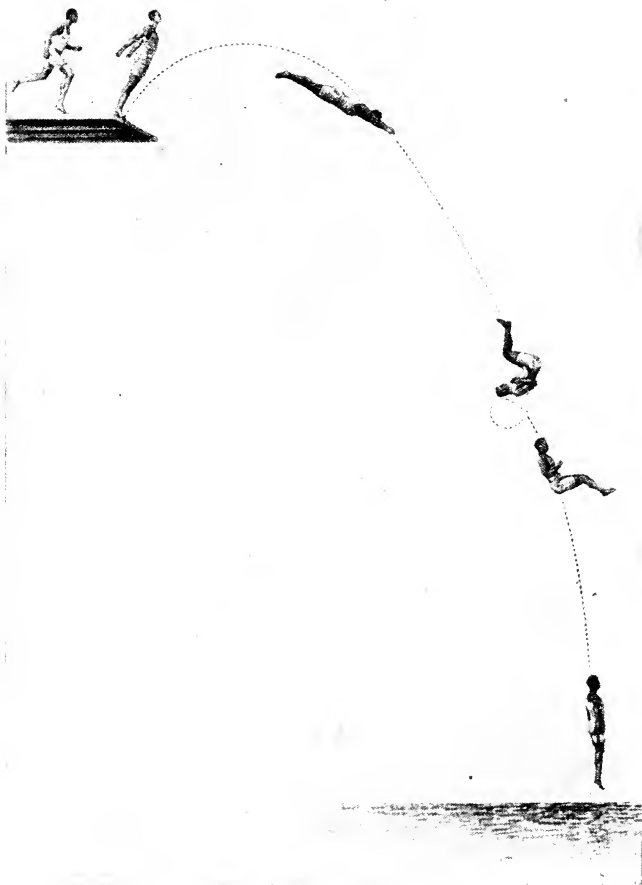
When a trophy or prize is given to a club scoring the greatest number of points in a meeting, the points shall be counted as follows:

	Points.
First in swim, plunge or dive.....	5
Second in swim, plunge or dive.....	3
Third in swim, plunge or dive.....	1
First in relay race.....	10
Second in relay race.....	6
Third in relay race.....	2
First in water polo.....	15
Second in water polo.....	9
Third in water polo.....	3

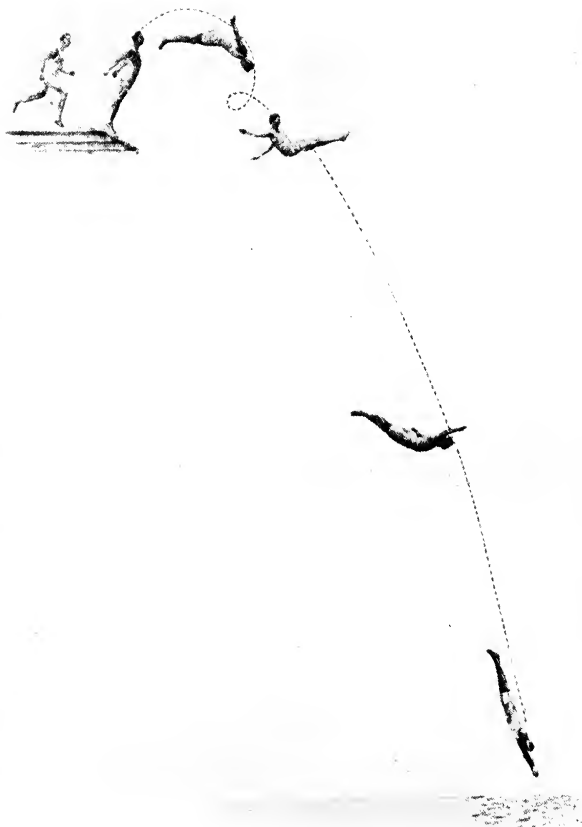
HOW TO SCORE A DIVING COMPETITION.

SUGGESTIONS FOR SCORE CARDS.

Blanks for voluntary dives to be supplied by the club holding the competition. After filling them out and signing them, competitors deliver them to the clerk of the course. The announcer announces each voluntary dive from these blanks when the respective competitor's turn comes, and the diving judges must see that the dive nominated shall be performed. After the competition these blanks are turned over to the diving scorers.



HIGH DIVE—FLYING SOMERSAULT FORWARD.



HIGH DIVE—ONE AND A HALF SOMERSAULT FORWARD.



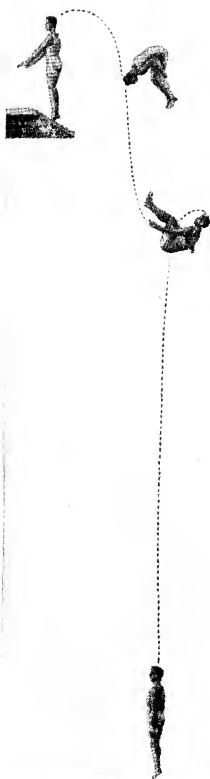
HIGH DIVE—ARMSTAND WITH SOMERSAULT.



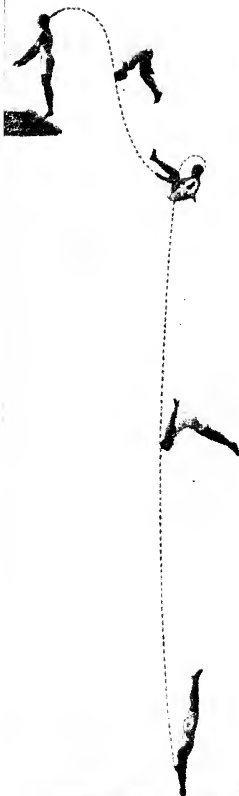
HIGH DIVE—ONE SOMERSAULT FORWARD.



HIGH DIVE—BACKWARD SPRING OUTWARD AND TURNING
INWARD WITH HEADER.

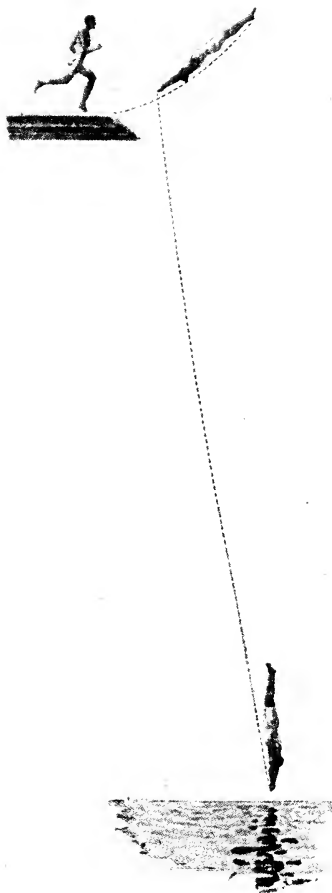


Backward spring outward and turning inward with somersault.

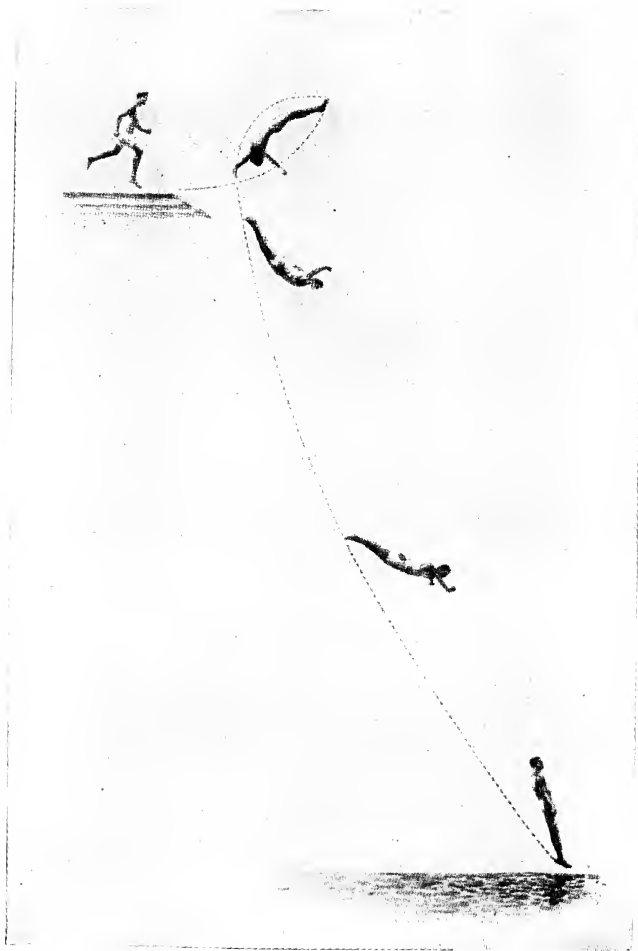


Backward spring outward and turning inward with $1\frac{1}{2}$ somersault.

HIGH DIVE.



HIGH DIVE—ISANDER'S DIVE.



HIGH DIVE—MOLLBERG'S DIVE.

VOLUNTARY DIVES.

	Number in Table	Description.	Grade of Difficulty
1.	6	Forward, 1½ Somersault, standing.....	1.6
2.	7	Backward Somersault.....	1.5
3.	16	Flying Dutchman, standing.....	1.8
4.	16	Flying Dutchman, running.....	1.9
5.	8	Backward, 1½ Somersault.....	2.2
6.	25	Jackknife, forward, with Half Twist, standing..	1.8

Competitor's Signature:

S. Jones.

VOLUNTARY DIVES.

	Number in Table	Description	Grade of Difficulty
1.	15	2½ Forward Somersault, standing.....	2.3
2.	15	2½ Forward Somersault, running.....	2.3
3.	18	1½ Flying Dutchman, standing.....	2.4
4.	18	1½ Flying Dutchman, running.....	2.4
5.	14	1½ Forward Somersault with Half Twist, standing	2.2
6.	12	Backward Spring, 1½ Forward Somersault....	2.0

Competitor's Signature:

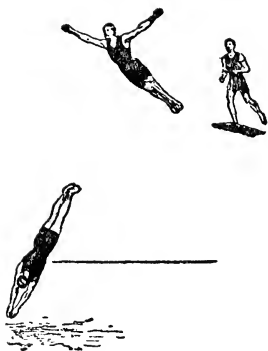
W. Smith.

VOLUNTARY DIVES.

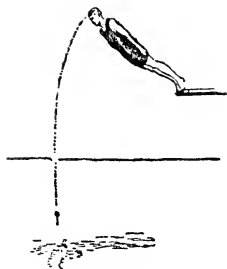
	Number in Table	Description	Grade of Difficulty
1.	6	Forward, 1½ Somersault, standing.....	1.6
2.	12	Backward Spring, 1½ Forward Somersault....	2.0
3.	16	Flying Dutchman, running.....	1.9
4.	16	Flying Dutchman, standing.....	1.8
5.	4	Full Twist, forward, running.....	1.8
6.	25	Jackknife, forward, with Half Twist, standing..	1.8

Competitor's Signature:

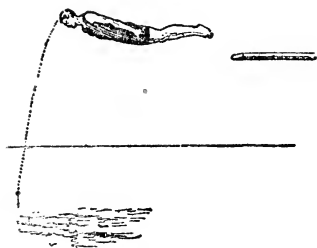
J. Brown.



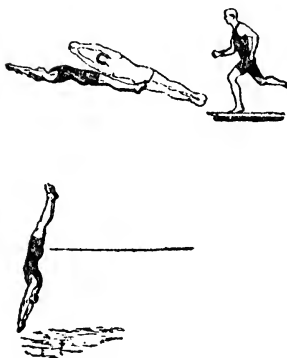
Plain header.



Falling dive forward.

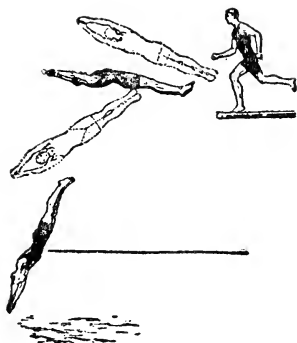


Ordinary header forward (arms
at sides).

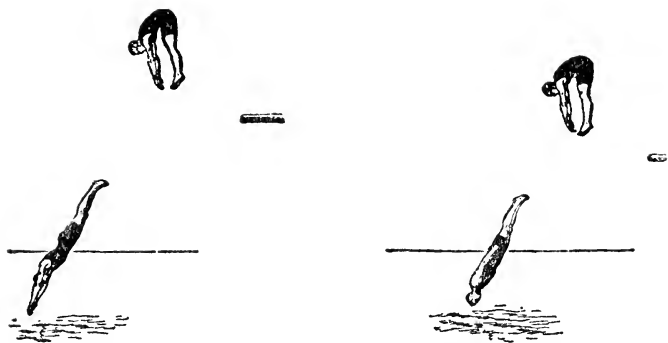


Screw dive forward with half turn.

SPRINGBOARD DIVE.



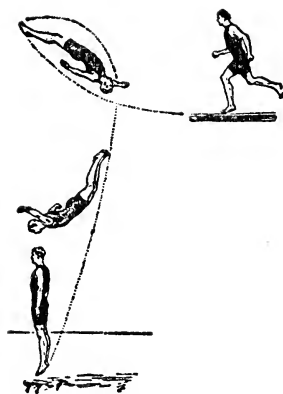
Screw dive forward with one turn.



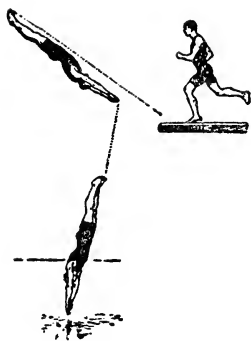
Pike dive forward.

Pike dive (arms at sides).

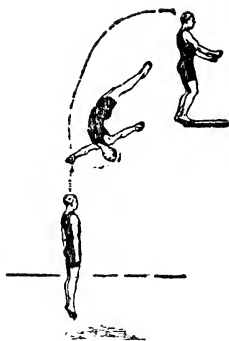
SPRINGBOARD DIVE.



Mollberg's dive.



Isander's dive.



Backward somersault.

SPRINGBOARD DIVE.

VOLUNTARY DIVES.

	Number in Table	Description	Grade of Difficulty
1.	12	Backward Spring, 1½ Forward Somersault....	2.0
2.	15	Forward, 2½ Somersault, running.....	2.3
3.	18	1½ Flying Dutchman, standing.....	2.4
4.	8	Backward, 1½ Somersault.....	2.2
5.	4	Full Twist, forward, running.....	1.8
6.	4	Full Twist, forward, standing.....	1.8

Competitor's Signature:

*W. Black.*SCORE CARD AS FILLED OUT BY JUDGE AND
DELIVERED TO DIVING SCORERS

First Column for Each Name Only to be Used by Judge.

NAME	JONES			SMITH			BROWN			BLACK		
1. Compulsory Dive	7			9			8½			9½		
2. Compulsory Dive	8			10			9			9		
3. Compulsory Dive	9			10			9½			10		
4. Compulsory Dive	9			10			9½			10		
1. Voluntary Dive	7			2			9			7½		
2. Voluntary Dive	9			3			7½			7		
3. Voluntary Dive	8			1			10			5½		
4. Voluntary Dive	4			0			10			9		
5. Voluntary Dive	1			6			6			8		
6. Voluntary Dive	7			8			7½			7		
Total.....												
Place Number...												

Judge's Signature:

Checked by

J. S. White.

SCORE CARD AS FILLED OUT BY DIVING SCORERS

The second column to be used for grade of difficulty for voluntary dives to be left blank for compulsory dives. Last column to be used for result of multiplication for voluntary dives, and on line of last compulsory dive the total for all compulsory dives to be extended.

NAME	JONES			SMITH			BROWN			BLACK		
1. Compulsory Dive	7			9			8½			9½		
2. Compulsory Dive	8			10			9			9		
3. Compulsory Dive	9			10			9½			10		
4. Compulsory Dive	9		33.0	10		39.0	9½		36.5	10		38.5
1. Voluntary Dive	7	1.6	11.2	2	2.3	4.6	9	1.6	14.4	7½	2.0	15.0
2. Voluntary Dive	9	1.5	13.5	3	2.3	6.9	7½	2.0	15.0	7	2.3	16.1
3. Voluntary Dive	8	1.8	14.4	1	2.4	2.4	10	1.9	19.0	5½	2.4	13.2
4. Voluntary Dive	4	1.9	7.6	0	2.4	0.0	10	1.8	18.0	9	2.2	19.8
5. Voluntary Dive	1	2.2	2.2	6	2.2	13.2	6	2.2	13.2	8	1.8	14.4
6. Voluntary Dive	7	1.8	12.6	8	2.0	16.0	7½	1.8	13.5	7	1.8	12.6
Total.....	94.5			82.1			129.6			129.6		
Place Number.	3			4			1½			1½		

Judge's Signature:

Checked by McCarthy.

J. S. White.

NAME	SUMMARY								
	JONES		SMITH		BROWN		BLACK		
	Points	Place	Points	Place	Points	Place	Points	Place	
Judge WHITE.	94.5	3	82.1	4	129.6	1½	129.6	1½	
Judge GREEN.	97.0	3	88.0	4	132.4	1	128.2	2	
Judge ROSE..	99.3	3	92.0	4	129.2	2	131.2	1	
Total.....	290.8	9	262.1	12	391.2	4½	389.0	4½	
Final placing. Average Points	96.93	3rd	87.37	4th	130.4	1st	129.67	2nd	

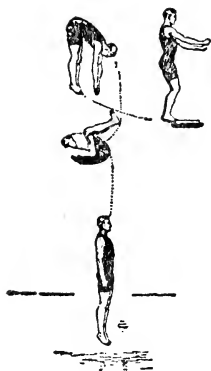
Scorers' Signatures:

J. Wilson. B. Gordon. J. Van Dyke.

Brown and Black having the same total of place numbers, the total of points decides the competition and Brown wins.



Pike dive with backward spring and turning inward.

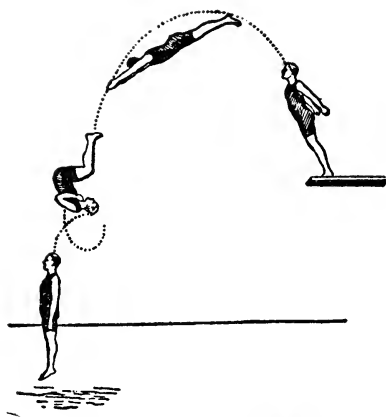


Pike dive with backward spring, turning inward and somersault.

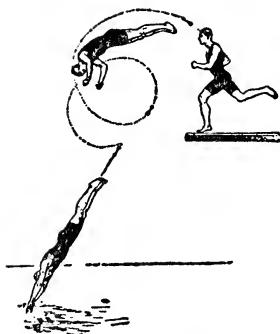


Pike dive with backward spring, turning inward and $1\frac{1}{2}$ somersault.

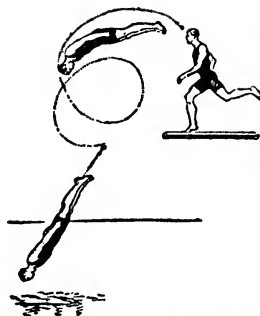
SPRINGBOARD DIVE.



Flying somersault forward.

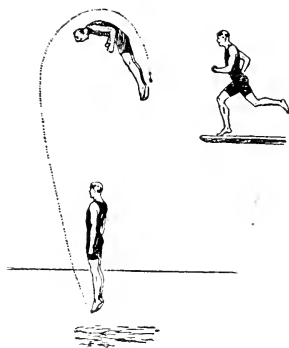


One and a half somersault.

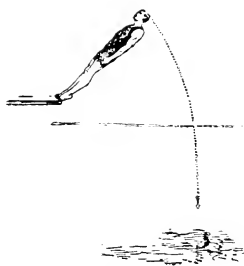


One and a half somersault
(arms at sides).

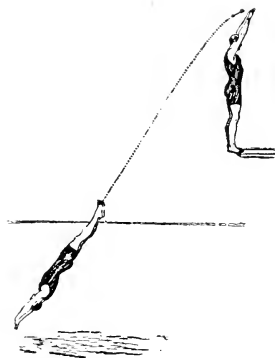
SPRINGBOARD DIVE.



Forward somersault.



Falling dive backward.



Ordinary header backward

SPRINGBOARD DIVE.

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- No. 110. Sleeveless, worsted, full fashioned, best quality. Plain colors only: Navy, Black or Iron Gray. Suit, \$6.00
- No. 614. Sleeveless, fine worsted, striping on shirt and tights. Black, Cardinal and White striping; Navy, Gray and White striping; Gray, Navy and Cardinal striping; Iron Gray, White and Black striping. Suit, \$5.00
- No. 109. Sleeveless, fine quality worsted, solid colors only, either Black, Navy Blue or Heather Mixture. Suit, \$5.00

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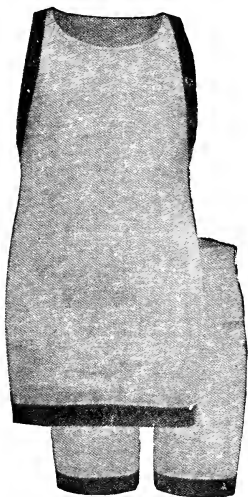
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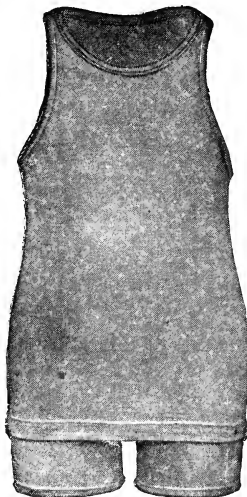
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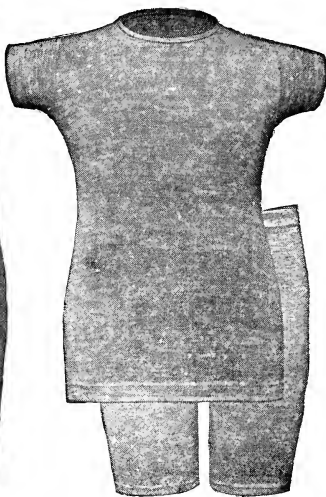
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No. 600PC



No. 601

No. 600PCS. Pacific Coast style, that is, one piece, with skirt which cannot be tucked inside of tights. Sleeveless, striped, cut worsted. Colors: Navy trimmed White; Black trimmed Red; Dark Gray trimmed White. Suit, \$4.50

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No. 600. Sleeveless, fine quality cut worsted, in plain colors only: Navy, Black or Gray. Suit, \$3.50

No. 300. Sleeveless, light weight worsted. Plain colors only: Navy, Black or Gray. No special orders. Suit, \$3.00

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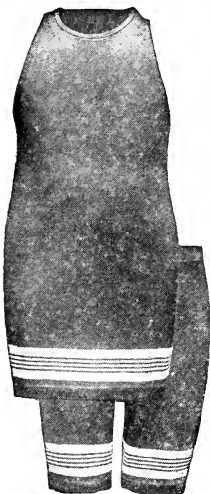


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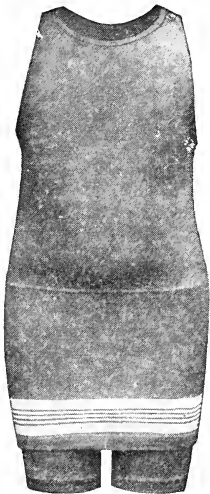
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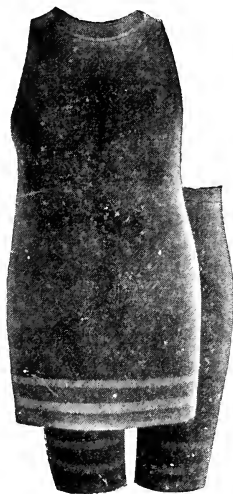
ALL STYLES FURNISHED IN SIZES 28 TO 46 INCHES CHEST MEASUREMENT
CHANGE POCKET IN TRUNKS OF ALL SPALDING SUITS



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No. 300PCS



No. 606

- No. 300S. Sleeveless, worsted. Striping on shirt and tights. Colors: Navy trimmed White, Black trimmed Red, Gray trimmed White. Suit, \$3.00
- No. 300PC. Coast style, one piece; skirt cannot be tucked inside of tights. Sleeveless, worsted, plain colors: Navy, Black or Maroon. Suit, \$3.00
- No. 300PCS. Coast style, one piece; skirt which cannot be tucked inside tights. Sleeveless, worsted. Striping on shirt and tights. Colors: Navy trimmed White, Black trimmed Red, Gray trimmed White. Suit, \$3.00
- No. 200. Sleeveless, three quarters worsted, in plain colors only: Navy, or Black. Suit, \$2.50
- No. 28. Quarter sleeve, cotton, fashioned, mercerized trimming, in following colors: Navy trimmed Red, Navy trimmed White. Suit, \$1.50
- No. P2S. Coast style, finest quality cotton, trimmed shirt and tights. Colors: Navy and Red or Navy and White. Suit, \$1.50
- No. 606. Sleeveless, cotton, in Navy Blue, with either Red or White trimmings on shirt and tights. Suit, \$1.25
- No. 605. Sleeveless, cotton, Navy Blue. Suit, 1.00

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